BEFORE THE JHARKHAND STATE ELECTRICITY REGULATORY

COMMISSION, RANCHI

Case (Tariff) No. 10 of 2020

In the matter of:

Tata Power Company Limited **... Petitioner**

-Versus-

Tata Steel Limited **Respondents**

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Filed BY

Place: Ranchi

Date

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BEFORE THE JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION, RANCHI

CASE (Tariff) NO. 10 of 2020

IN THE MATTER OF:

Tata Power Company Limited ...Petitioner.

- Versus –

Tata Steel Limited ...Respondent

ADDITIONAL AFFIDAVIT

I, Abhay Kumar, aged 46 years, S/o Shri Subh Narayan Shrivastava, residing at Flat No. B-1/04, Silvercity Apartment, Sector-93, Noida - 201304, do hereby solemnly affirm and state as under:

1. I am working as the Head- Legal, with The Tata Power Company Limited, the Petitioner in the above matter, and am duly authorized and competent to swear and depose the present affidavit on behalf of Tata Power.

2. That the petition for approval of True Up of FY 2019-20 & APR 2020-21 along with MYT Petition & MYT Business Plan for FY 2021-22 to FY 2025-26 was filed on 1.12.2020 (Case (T) No. 20 of 2020 before this Hon'ble Commission.

3. That Hon'ble Jharkhand State Electricity Regulatory Commission (JSERC) has sought additional information in the aforesaid petition *vide* its Letter dated 28th January 2021. The petitioner herewith submits the additional information/clarification as sought in the accompanying appendix and annexures.

4. That I have perused the accompanying information and the facts stated therein are true and correct to the best of my knowledge based on the records of Tata Power and information received from the concerned officers of the Petitioner and that the legal submissions made therein are based upon information received by me and believed to be true and correct.

The Tata Power Company Ltd.
TATA

Deponent

VERIFICATION

I, the Deponent above named, do hereby verify that the contents of this affidavit are true and correct, no part of it is false and nothing material has been concealed therefrom.

Verified at Noida on this__ day of _______2021.

The Tata Power Company Ltd.
TATA

Place: Noida

Date:

Deponent

NOTARY ★ STATE GOVT. OF U.P ★ VINAI KUMAR SHARMA ★ Regd. No. 02/03/2012 G.B. Nagar U.P

ATTESTED
Vinai Kumar Sharma
Public Notary
Noida (G.B.Nagar) U.P
11 FEB 2021

APPENDIX

The point-wise replies to the queries raised in the letter No. 'JSERC/Case (Tariff) No. 10 of 2020/402' dated 28th January, 2020, w.r.t. the petition for True-up of FY 2019-20 along with Annual Performance Review of FY 2020-21 and MYT 2022-26 for Unit # 2 & 3 of Jojobera Power Plant by the Hon'ble Commission are presented below :

True-up for FY 2019-20:

Query 1

1. **The Petitioner is required to submit the auditor certificate certifying the operational parameters for Unit-II & Unit-III for FY 2019-20.**

Reply

2. Tata Power humbly submits that Statutory Auditor certifies only the financial data. For Operational data, the petitioner has relied upon following documents/certificates and such practice has been followed in the past as well.
   (a) Plant Availability: For Plant Availability, it has relied upon the Monthly PAF Certificates issued by Tata Steel LDC. The PAF certificates are enclosed as Annexure P3 in the Main Petition for kind reference of the Hon'ble Commission.
   (b) Monthly Generation and Auxiliary Power. For this, we have relied upon the monthly Generation Report which is duly signed by the representatives of Tata Steel, a long-term beneficiary & Tata Power. The generation report is enclosed hereto and marked as **ANNEXURE R1** for kind perusal of the Hon'ble Commission.
   (c) Coal GCV: Tata Power has appointed a third party for sampling and GCV measurement of each rake. A sample copy of third-party certificate showing the GCV of the rake is being attached hereto as **ANNEXURE R2** for the kind reference of Hon'ble Commission. Based on such GCV daily, Monthly and Annual GCV is worked out considering quantity of the coal as weight.
   (d) Transit Loss: For working out Transit loss of a particular rake, we take out the difference of the weight as per railway receipt (RR) and the weight as recorded at the Unloading Point inside the Premises of Tata Power. This exercise is carried out for each rake of a particular type of coal during the entire month and aggregated to arrive at monthly weighted average transit loss for that category of coal. Railway Receipt and Transaction Recorded at Plant Premises for a sample

Rake and its transit loss computation is attached herewith as **ANNEXURE R3** (Colly) for kind the reference of Hon'ble Commission.

(e) SHR: As stated above, GCV of each coal intake/rake is measured by a Third party /agency who is deployed at site by Tata power. Based on the certified GCV value and actual coal consumption, actual generation and actual LDO consumption for each unit, Tata power computes SHR. A computation sheet for SHR calculation is attached as **ANNEXURE R4** herewith for the kind reference of the Hon'ble Commission.

Query 2

3. **The Petitioner has submitted availability certified by LDC-Tata Steel. The petitioner is required to provide the reason for not submitting the true copy certified by State LDC.**

Reply:

4. It is humbly submitted that as per the Power Purchase Agreement (PPA) between Tata Power & Tata Steel Limited (Long Term Beneficiary/TSL), Tata Steel Load Dispatch Centre (TSLDC) which shall mean the Power Management Centre of the Tata Steel Limited is authorized to Monitor and Certify Plant Availability Factor of the Generating Units of Jojobera Power Plant of Tata Power.
5. The relevant excerpts of the said term of PPA have been reproduced below:

"Tata Steel Load Dispatch Centre or "TSLDC" shall mean the Power Management Centre of the Tata Steel Limited to discharge the following functions, viz:-

(a) To ensure supply of reliable and quality power to all its consumers by taking following actions:

i. Decide generation level of various units of Tata Power generators from time to time in line with load of Jamshedpur Tata Steel System, for optimum dispatch of electricity and system stability.
ii. Monitor and control of operation in Jamshedpur Tata Steel System.
iii. Ensure reliable and quality power supply.

(b) Monitor and Certify Plant Availability Factor of the Generating Units
…."

6. Further, it will not be out of place to mention that the Hon'ble Commission has approved the Plant Availability Factor (PAF) in previous True-up filings based on the PAF Certificates issued by TSLDC only. Hence, in view of the above, Tata Power humbly requests the Hon'ble Commission to approve the PAF for FY 2019-20 as per PAF

Certificates duly approved by TSLDC which are enclosed as Annexure P3 in the Main Petition.

Query 3

7. **The Petitioner is required to clarify the value considered in the audited accounts toward the de-capitalised asset (both de-capitalised original project asset and de-capitalised additional capitalisation) is book value or residual value. Further, the Petitioner is also required to provide the detail of assets de-capitalised along with its put-to-use date and depreciated value (%) till date.**

Reply:

8. It is humbly submitted that the value considered towards de-capitalization is the book value/estimated book value. As elaborated in the Petition, assets whose original cost is available in the books of account, decapitalization of the same has been done as per said book value or an estimate of such book value.
9. In addition to above, Petitioner has also proposed for decapitalization of some of the replaced assets for which decapitalization has not been performed in books. This is mainly because such removed assets are being used in rotation for overhaul or kept as emergency spare to be used during breakdowns and have future economic value. However, in compliance to Hon'ble Commission observations in previous Tariff Order, such removed assets have been decapitalized for the purpose of Tariff computations without prejudice to Petitioner's rights on its stand in this regard.
10. In regard to second query, the details of assets decapitalized for the purpose of Tariff have been summarized in the Table below with put to use date and depreciated value (%) till date.

Particulars: (Item Name/Name of Scheme)	**In Units**	**Asset Class**	**Date of Capitalization (Put to Use)**	**Depreciated Value (%)**
536800 (UPS battery Banks)	2	Batteries	01-04-2000	10.0%
Switch gear Equipments	2	Switchgear, including cable connections	01-02-2001	14.6%
Vehicles				
Tata sumo SA+ series, JH-05-F6734	1,2,3,4,5	Vehicles	23-12-2003	10%
Tata sumo SA+ series-AC	1,2,3,4,5	Vehicles	31-03-2004	10%
Burner Panel Bends	2	P&M	01-02-2001	14.6%
2X 60 KVA UPS	2	Batteries	01-02-2001	10.0%
Up gradation of Unit 2 Turbine Supervisory System	2	P&M	01-02-2001	14.6%

Up Gradation of Furnace Safeguard & Supervisory System and BOP Control System	3	P&M	01-02-2002	18.5%
Replacement of Dead Tank CT with Live Tank CT	1,2,3,4,5	P&M	01-02-2002	18.5%
IT Assets *	1,2,3,4,5	IT Equipments		29.49%
Total				

* Further detail of IT Assets and computation of depreciated value for above items is annexed herewith in excel format and marked as **ANNEXURE R5** for kind perusal of the Hon'ble Commission.

11. Moreover, it is submitted that the summary of decapitalizations is also provided in Table 19 and in Table 20 of the Petition respectively. Table 19 provides decapitalization details as per Books whereas Table 20 provides for decapitalization not performed in Books. Further, Table 21 provides asset class-wise total decapitalization for Unit 2 and Unit 3 respectively. The same may kindly be referred to while deciding decapitalizations for FY 2019-20.

Query 4

12. **The Petitioner should submit actual income tax paid along with the documentary evidence for FY 2019-20.**

Reply:

13. The Petitioner hereby submits the actual tax has been paid under MAT provisions at an effective rate of 17.472% (i.e., 58323651/333812109) for FY 2019-20, wherein Rs. 58323651 is Total tax, interest and fee payable whereas Rs. 333812109 is the Book Profit under MAT.
14. The above numbers can be seen in the ITR acknowledgment which is enclosed hereto and marked as **ANNEXURE R6** for kind perusal of the Hon'ble Commission.

Query 5

15. **It is observed that the Petitioner proposes different methodology for calculation of depreciation when compared to its earlier Petition and method approved by the**

Commission in its earlier Orders. The Petitioner is required to provide the justification for the same.

Reply:

16. It is humbly submitted that since cumulative depreciation on Gross Fixed Asset, i.e., (Original Cost and Additional Capitalisation) has crossed 70%, the Petitioner, therefore, in terms of Regulation 7.32 of the Generation Tariff Regulations 2015 has computed the depreciation on the aggregate asset by dividing the balance depreciable value by balance useful life of the project. The useful life of the Project is 25 years as per Regulation 2.1(58) and 2.1(27) of GTR 2015. The Petitioner further in section D.5.3 has in detail provided the reasons and computation of the depreciation for 2019-20. Further, the interpretation of Hon'ble CERC on similar Regulations regarding spreading of balance depreciable value as contained in CERC Tariff Regulations 2014 was also elaborated upon with excerpts from CERC Tariff Orders illustrating the computation of depreciation by Hon'ble CERC in terms of above Regulations which is also the case of the Petitioner in the instant Petition. It is, therefore, humbly requested to the Hon'ble Commission to kindly refer the above section D.5.3 for detailed justification and the same is not repeated hereto for sake of brevity.
17. Further, on the query that the proposed methodology is different from previous Petition, Tata Power most humbly submits that the proposed methodology/Computation of depreciation is not different from earlier Petition. In fact in the Petition for True-up of 2016-17 and 2017-18, the Petitioner on similar lines had proposed for the recovery of balance depreciable value as on 31.03.2016 within the balance PPA life. However, the above proposal which was in deviation to the Regulations (since we were seeking spreading within the PPA life of 30years instead of 25 years) was not considered by the Hon'ble Commission with following observations as given in the Mid Term Review Order dated 14.02.2020. The Petitioner has, therefore, now proposed spreading of depreciation in balance useful life out of 25 years.

> *" 5.98 The Commission is of the view that to substantiate its proposal for change in the methodology for calculation of depreciation, the Petitioner was required to carry out detail study to ascertain the residual life of asset. At present, the Petitioner proposal for accepting the different methodology for calculation of depreciation without any documentary evidence demonstrate only its eagerness to recover the expenditure incurred. Hence, for carrying out the True-up for FY 2017-18, the Commission has approved the deprecation as per rate defined in JSERC Generation Tariff Regulations, 2015. However, the Commission shall look into the issue while framing the tariff*

regulations for the third control period. The Petitioner is at liberty to submit its proposal at the time of finalising the tariff regulations for Commission's consideration."

18. In light of the above observations of the Hon'ble Commission and considering the extant Regulations, the Petitioner proposed the corrected depreciation for 2018-19 in the Petition for true-up of 2018-19 (Case (Tariff No. 09 of 2019)) for kind consideration of the Hon'ble Commission. However, Hon'ble Commission, while disposing the above Case (Tariff) No. 09 of 2019, has kept the above computations proposed by the Petitioner in abeyance with following observations:

"6.66 However, the Petitioner during Public Hearing dated August 07, 2020 and through additional submission dated August 14, 2020 revised the calculation of depreciation and suggested that the remaining depreciable amount of both Original Capital Cost and additional capitalization be equally spread on Balance Useful Life of the Project considering 25 years of useful life as the cumulative depreciation till 2017-18 has crossed 70% for both the Units.

6.67 The Commission observes that the Petitioner has revised their deprecation calculation during the Public Hearing scheduled on August 07, 2020 and submitted the detail to the Commission on August 14, 2020. The Commission is of the view that any material change impacting tariff need to be submitted well in advance before the Commission as well as before other stakeholders for public scrutiny. Hence, the Commission at this stage has not gone into the merits of the revised approach and approves the deprecation as per the approach adopted in its earlier Tariff Orders…."

19. Therefore, since the proposed corrected methodology is yet to be disposed of by the Hon'ble Commission on its merit, the Petitioner followed the above methodology for computation of depreciation for 2019-20 and subsequent years as presented in the Petition. The Hon'ble Commission may further appreciate that the proposed methodology is not different and is completely in accordance with the treatment given by Hon'ble Commission for spreading of balance depreciable value on similar Regulations as detailed in the section D.5.3 of the Petition.
20. It is respectfully prayed before this Hon'ble Commission to kindly approve the proposed depreciation for 2019-20 and subsequent years as presented in the Petition. Such approach shall be in consonance with approach settled by Hon'ble CERC and in accordance with true essence of Regulations 7.32 read with other applicable Regulations as per GTR 2015.

Query 6

21. **The Petitioner is required to provide comparison of each component of O&M Expenses claimed by it vis-à-vis actual booked in the audited accounts for FY 2019-**

20. Further, the Petitioner is required to provide the detail of activities carried out under A&G Expenses & R&M Expenses.

Reply:

22. The comparison of each component of O&M expenses for Unit 2 & 3, claimed vis-à-vis actual as per Audited Accounts have been presented in the Table below for kind perusal of the Hon'ble Commission. The O&M Expenses have been categorized under Component A (Expenses which are allowed on normative basis) and Component B (Expenses which are allowed on actual basis) as per the extant Regulations and methodology being followed in the previous Order. Further, expenses approved in the APR Order have also been presented side by side to the figures claimed by the Petitioner for true-up of FY 2019-20.

Rs. Crore

Units →	**Unit 2**			**Unit 3**		
Particulars ↓	**Approved in APR Order**	**Proposed in True-Up Petition**	**As per Audited Accounts**	**Approved in APR Order**	**Proposed in True-Up Petition**	**As per Audited Accounts**
A: O&M Allowed on Normative Basis						
Employee Expenses excluding TL	7.88	7.88	7.25	7.88	7.88	7.25
R&M Expenses	20.46	20.46	12.66	14.61	14.61	12.85
HO & SS Expense	10.76	10.76	10.12	9.43	9.43	10.14
Other A&G Expense	5.14	5.14	6.00	4.70	4.70	6.06
B: O&M Allowed on Actual basis						
Terminal Liabilities	0.25	0.92	0.92	0.25	0.92	0.92
Ash Disposal Expenses	3.63	4.15	4.15	3.71	4.06	4.06
Raw Water Expenses	2.55	4.40	4.40	2.61	4.28	4.28
Application Fees & Publication Expenses	0.31	0.28	0.28	0.3	0.28	0.28
Capital Spares	0.70	2.53	2.53	0.7	2.59	2.59
Total O&M Expenses (A+B)	51.68	56.52	48.32	44.19	48.75	48.44

23. It is further submitted that Repair and Maintenance expenses are mainly expenses towards routine and annual maintenance of the machines which include both services and spares cost. The expenses in accounts have been booked under two Ledgers, namely consumables and services cost towards various activities carried out during the year 2019-20. The breakup of the Administrative and General expense for 2019-20 has been extracted and annexed hereto as **ANNEXURE R7** alongwith brief details of expenses

booked under each head for the kind perusal of the Hon'ble Commission whereas the activities which are carried out under the Repair and Maintenance is detailed in Annexure R21 of the instant submission and, hence, it is requested to kindly refer the same.

Query 7

24. **There is large variation in O&M Expenses between Unit-II and Unit-III. The Petitioner is required to substantiate the same considering the fact that both the Units are similar in size, at same location and of same vintage.**

Reply:

25. It is submitted that significant variation in proposed O & M Expenses between Unit 2 & 3 is mainly due to difference in normative Repair and Maintenance ('R & M') Expenses as shown in column (1-2) in the Table below.

(Rs. Crore)

Units →	**Unit 2**	**Unit 3**		**Unit 2**	**Unit 3**	
Particulars ↓	**Proposed in True- Up Petition**		**Diff**	**As per Audited Accounts**		**Diff**
A: O&M Allowed on Normative Basis	**1**	**2**	**1 - 2**	**3**	**4**	**3 - 4**
Employee Expenses excluding TL	7.88	7.88	0	7.25	7.25	0
R&M Expenses	20.46	14.61	5.85	12.66	12.85	-0.19
HO & SS Expense	10.76	9.43	1.33	10.12	10.14	-0.02
Other A&G Expense	5.14	4.70	0.44	6.00	6.06	-0.06
B: O&M Allowed on Actual basis						
Terminal Liabilities	0.92	0.92	0.00	0.92	0.92	0.00
Ash Disposal Expenses	4.15	4.06	0.09	4.15	4.06	0.09
Raw Water Expenses	4.40	4.28	0.13	4.40	4.28	0.13
Application Fees & Publication Expenses	0.28	0.28	0.00	0.28	0.28	0.00
Capital Spares	2.53	2.59	-0.07	2.53	2.59	-0.07
Total O&M Expenses (A+B)	56.52	48.75	7.77	48.32	48.44	-0.12

26. Tata Power hereby submits that normally Annual Shutdown ('ASD') of the Units 2&3 are taken in alternate years for the purpose of major overhauling/annual maintenance. As a result, R&M expenditure of a unit is usually higher in the year in which ASD is scheduled barring exceptional case if any and this basically creates the difference between the R&M expenses of Unit 2 and Unit 3.
27. However, as evident from the above Table, the difference between the actual R&M expenses of Unit 2 and Unit 3 is negligible. This is primarily because of deferment of Annual Shutdown of one of the Unit to next year in view of the expected commissioning

of FGD System for the Unit in FY 2020-21. Moreover, it is humbly submitted that such variation in R & M expenses in Unit # 2 & 3 may occur due to various reasons, viz, shutdown schedule, any major repair activity in any unit executed as & when required in a financial year and hence R&M expenditure may not follow any consistent trend and comparing the same may not be correct.

Query 8

28. **The Petitioner is required to provide the detailed purpose and use of capital spares as claimed in the Petition for FY 2019-20 for both the Units.**

Reply:

29. It is humbly submitted that against the projection of Rs. 0.70 Crore each in Unit 2&3 for FY 2019-20, the actual cost incurred towards capital spares is Rs. 2.53 Crore in Unit 2 and Rs. 2.59 Crore in Unit 3. Such variation is mainly on account of receipt of part of the Capital Spares in 2019-20 which was earlier projected for delivery in 2020-21 considering the then prevailing circumstances. It is humbly reiterated that such variations in supply schedule was beyond the anticipation of the Petitioner and the detailed justification has been provided in Annexure P19 of the Petition and, hence, the same is not repeated herein for the sake of brevity. It is, therefore, humbly requested before this Hon'ble Commission to kindly refer the Annexure P19 of the Petition for detailed justification. It may be kindly noted that claimed cost towards capital spares is well within the approved figures. Summary of the Capital spares claimed is presented in the Table below for ready reference:

Proposed Capital Spares - Unit 2 (In Rs. Crore)						
Particulars	**Approved [Value] in MYT Order**	**Cumulative Claim till 2018-19**	**Proposed Now**		**Phasing Approved in MTR Order**	
	FY 17-21		**FY 2019-20**	**FY 2020-21**	**FY 2019-20**	**FY 2020-21**
Turbine and Generator Bearing sets	1.00		0.21	0.79		1.00
Coal Mill Gear Box	1.00		0.83	0.17		1.00
Turbine Stop & Control Valve Actuator	1.00		0.93	0.07		1.00
Procurement of Critical Spares for Turbine and DCS Cards	1.40	0.64	0.56	0.14	0.70	
Total Capital Spares	**4.40**	**0.64**	**2.53**	**1.17**	**0.70**	**3.00**

Proposed Capital Spares - Unit 3 (In Rs. Crore)						
Particulars	**Approved [Value] in MYT Order**	**Cumulative Claim till 2018-19**	**Proposed Now**		**Phasing Approved in MTR Order**	
	FY 17-21		**FY 2019-20**	**FY 2020-21**	**FY 2019-20**	**FY 2020-21**
Turbine and Generator Bearing sets	1.00		0.21	0.79		1.00
Coal Mill Gear Box	1.00		0.83	0.17		1.00
Turbine Stop & Control Valve Actuator	1.00		0.88	0.12		1.00
Procurement of Critical Spares for Turbine and DCS Cards	1.40	0.69	0.68	0.02	0.70	
Total Capital Spares	**4.40**	**0.69**	**2.59**	**1.11**	**0.70**	**3.00**

30. The purpose of each of the above capital spare is enclosed in **ANNEXURE R8** for kind perusal of the Hon'ble Commission.

Query 9

31. **It is observed that the Normative Specific Oil Consumption approved for TPCL for the Control Period is 0.50 mL/kWh, whereas the Petitioner has claimed the same as 1.00 mL/kWh. The Petitioner should submit necessary justification for the same.**

Reply:

32. It is humbly submitted that the Tata Power has claimed the Normative Specific Oil Consumption (S.O.C) as per Regulation 8.4 of the JSERC Generation Tariff Regulations 2015 which provide for 1 mL/kWh.
33. However, it is submitted that while disposing of the Multi-Year Tariff ('MYT') Petition for 2nd Control Period i.e. FY 2017-21, the Hon'ble Commission has approved 0.5 mL/kWh in MYT Order for Unit # 2 & 3 of Jojobera Power Plant. Tata Power had sought for a review of such revision in Norms for S.O.C. and filed a Review petition bearing Case No. 06 of 2018. On 9th January 2019, the Hon'ble Commission, while disposing of the above Review Petition has not allowed the prayer of Tata Power for consideration of Normative S.O.C. as per Regulation 8.4 of the JSERC Generation Tariff Regulations 2015. Further to the Review Order, Tata Power has filed an appeal before the Hon'ble APTEL vide Appeal No. 274 of 2019 for allowance of Normative S.O.C at 1 mL/kWh as per Regulation 8.4 of the JSERC Generation Tariff Regulations 2015 notified for 2nd Control Period (i.e. from FY

2016-17 to FY 2020-21) which is currently pending before Hon'ble Tribunal for adjudication.

Query 10

34. **It is observed that coal is sourced from different coal sources having different GCV's and landed costs. The Petitioner is required to provide the justification for deviation from the approved cost and purchase plan as per the earlier Order approved by the Commission. Further, the Commission observed that the energy charge claimed by the Petitioner is higher when compared to the approved value. The Petitioner is required to justify the same with reason for higher energy charge. Further, the Petitioner is also required to provide proper justification why such deviation is not brought to the notice of the Commission.**

Reply:

35. It is humbly submitted that Tata Power has provided an appropriate justification for deviation from the approved coal procurement plan in Section D.2 of the main Petition. Also, vide its report dated 30.06.2020 in compliance to earlier directive passed in previous true-up Orders had already apprised Hon'ble Commission about the actual coal mix, deviation from the approved plan and reasons for such deviations which were beyond the Control of Tata Power. However, quantum of deviation from approved fuel mix and reasons for the same are provided below for kind consideration of the Hon'ble Commission:

36. It is submitted that the Petitioner considering the situation prevailing then and in anticipation of commencement of supply under SHAKTI Coal from the month of February 2020 had submitted revised fuel mix for FY 2019-20 with detailed justifications in its MTR Petition and APR Petition for FY 2019-20 filed in December 2019. In the revised estimate, Tata Power had considered the actual coal consumption up to month of November-19 and considered actual Coal mix for April -19 to November -19 as projection for the month of December-19 and January-20 and proposed a revised coal mix meeting the 61% requirement through Middling Coal and Balance 39% through SHAKTI Coal for the month of February-20 and March-20. The Hon'ble Commission after due prudence check approved the proposed Coal Mix in MTR Order dated 14.02.2020 and in the APR Order for 2019-20 dated 09.09.2020.

37. The actual coal mix for 2019-20 for Unit 2 and 3 alogwith deviation from the approved mix is presented in the Table below. Coal sourced from collieries of west Bokaro is shown together for ease of reference and comparison.

Particulars	Apri-19 to March 20 Unit 2		Apri-19 to March 20 Unit 3	
Coal Mix	Approved	Actual	Approved	Actual
Coal from TSL WB Collieries*	72.63%	65.49%	73.57%	66.85%
SHAKTI	7.01%	1.45%	6.84%	1.59%
E-auction	3.86%	16.17%	3.32%	13.95%
Washery	4.84%	6.70%	4.85%	7.08%
Imported	11.67%	10.19%	11.42%	10.53%
Total	100.00%	100.00%	100.00%	100.00%

As can be seen from the above, one of the primary reasons for deviation in the coal mix was lower supply of the SHAKTI Coal since supply of SHAKTI Coal could commence from only one of the subsidiaries viz. ECL and, in spite of taking all diligent steps, supply from MCL and CCL could not start for reasons beyond the control of Tata Power as elaborated in following paragraphs. The Petitioner, therefore, had to depend on other supplies particularly e-Auction Coal and other available stocks.

38. At the time of filing the APR Petition for FY 2019-20 in month of December 2019, Tata Power in view of the progress made then, estimated that all the mandatory requirements of signing of Fuel Supply Agreement (FSA) and Tripartite Agreement for Coal Quality Monitoring at Loading end as required under FSA were expected to be completed by January'2020 and, therefore, full supply (prorated for last two months) of SHAKTI Coal was projected in the month February and March 2020 for meeting 39% of the coal requirement for Unit 2 and Unit 3 for those months. However, actual supply could commence from only from one of the subsidiaries viz. ECL and, supply from MCL and CCL could not start in spite of taking all diligent steps and for reasons beyond the control of Tata Power resulting into minor variations in the approved Coal Mix.

39. It may kindly be noted that LoI dated **12.07.2019, 16.07.2019** and **17.07.2019** have been received on **13.07.2019, 17.07.2019** and **18.07.2019** from ECL, MCL and CCL respectively. Thereafter, getting approval of the Hon'ble Commission on the amended PPA on 06.09.2019 for incorporating discount methodology for coal under Round 2 of Shakti Scheme, amended PPA was executed on 07.09.2019 between the parties and the same was submitted to CCL, ECL and MCL immediately on 09.09.2019 for execution of FSAs as required under clause 3.6.8.1 of the Scheme Document and further requesting them to

expedite on signing of FSA. Copy of the cover letters are enclosed as **ANNEXURE R9** for kind perusal of the Hon'ble Commission. Relevant Clause under scheme document is extracted below for ready reference.

"3.6.8 Submissions by Provisional Successful Bidder(s)

Each Provisional Successful Bidder will be required to submit the following documents and information, ***within 60 (sixty) days of issuance of LOI*** *to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:*

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; *and*

3.6.8.2 Submission of the documents specified in Annexure X, as applicable, to the relevant Subsidiary"

40. While FSA with ECL got executed on 09.10.2019, the FSAs with CCL and MCL got executed on 03.01.2020 and 10.02.2020 only after their internal approvals and completion of necessary verifications of the documents by these subsidiaries of Coal India Limited (CIL), which took some time. It is understood that since verifications and submissions of documents was taking time for some of the successful provisional bidders, CIL as per clause 3.6.8 of the Scheme document has amended the timelines for submission of the required documents on 14.09.2019, 25.10.2019, 18.12.2019, 10.02.2020 and 23.04.2020 vide various corrigenda revising the 60 days period in the Scheme Document as quoted above to 105 days, 150 days, 195 days, 240 days and 300 days respectively. True-Copies of the Corrigenda as issued by Coal India Limited are enclosed as **ANNEXURE R10** respectively for kind reference of the Hon'ble Commission.
41. Further, as per FSA, for coal quality monitoring at loading end, it was required to have appointment of Third-Party Agency (TPA) and a Tripartite Agreement between TPA, seller and purchaser to facilitate the scope of work as envisaged in the FSA. Para Relevant for requirement and appointment of TPA is extracted below:

"…5.6.2 Detail modalities for collection, handling, storage, preparation and analysis of samples by Third Party shall be as per Schedule IV…"

"…Schedule IV

Appointment of the Third Party Agency

*The purchaser may select a Third Party Agency ("**TPA**") to conduct the sampling and analysis from the list of third parties empaneled by CIL from time to time. At present following agencies are empaneled:*

(a) *Central Institute of Mining and Fuel Research ("**CIMFR**")*
(b) *Quality Council of India ("**QCI**")*
(c) *Indian Institute of Technology ("**Indian School of Mines**")……"*

42. In view of the above requirements, Tata Power indicated its consent to ECL on 10.10.2019, CCL on 04.01.2020 and MCL on 30.01.2020. While tripartite agreement for ECL was signed on 16.10.2019, tripartite agreement for CCL and MCL got executed on 28.02.2020 and 17.03.2020 after regular follow-ups. Copies of letters dated 10.10.2019, 04.01.2020, 30.01.2020 and the email communication/intimation dated 26.02.2020 and 16.03.2020 for signing of the Tripartite agreement for CCL and MCL are enclosed as **ANNEXURE R11** (Colly) for kind perusal of the Hon'ble Commission.
43. In view of foregoing, it is humbly submitted that it took some time to execute FSAs and Tripartite agreement, but Tata Power has acted diligently and took all efforts to expedite the above execution without any delay. However, time taken by CIL and subsidiaries for verification and signing is procedural requirement and same was not within the control of the Petitioner and, hence, it had to depend upon the other supplies particularly forward e-auction coals and available stocks for these months.
44. After signing of the tripartite agreement, Tata Power in pursuit to have allocation for the month of March submitted its request to CCL after making required payments on 26.02.2020, however, no supply was made available by CCL under above request up to 23.03.2020. However, understanding the already lower demand by Distribution Licensee to be further suppressed due to the restrictions imposed by Central and State governments due to COVID-19 and noting high stock availability and the limitations of Manpower, Tata Power was constrained to inform subsidiaries of coal companies not to supply coal for Tata Power Jojobera Power Plants. (Copies of the above referred Letters are enclosed as **ANNEXURE R12 (Colly)** for kind perusal of the Hon'ble Commission.
45. In addition to above, the Petitioner has claimed actual transit loss in case of Middling Coal and 2-Product +Tailing Coal (by Rake) which are washed category coal in terms of Hon'ble Tribunal Judgment dated 14.11.2013 in Appeal No 147 of 2012 and Regulation 16.4 of GTR 2015. The actual Transit Loss in Middling Coal and 2-Product +Tailing Coal (by Rake) is 2.79% & 4.85% respectively for FY 2019-20 which is beyond the control of Tata Power and, hence, for the purpose of computation of Energy Charges it has considered the actual transit loss in case of Middling Coal and 2-Product Coal (by Rake) and normative transit loss in other categories of coal as provided in Regulation 8.21 of the GTR 2015. Also, as submitted above, Normative Specific Fuel Oil Consumption has been considered as per

Regulation 8.4 of the JSERC Generation Tariff Regulations 2015, i.e., 1 ml/kWh instead of 0.5ml/kWh as considered by Hon'ble Commission in the MYT Order.

46. Deviation in the proposed energy charge rate (ECR) for 2019-20 compared to ECR approved in the APR Order for 2019-20 and effect of each factor as mentioned above on ECR have been demonstrated in the Table below for kind reference of the Hon'ble Commission: Computation of deviations in ECR alonwith impact on ECR on account of reason as presented in the Table below is annexed herewith and marked as **ANNEXURE R13** for kind reference of the Hon'ble Commission.

Particulars	**UoM**	**Unit 2**	**Unit 3**
$ECR_{PROPOSED}$	Rs/kWh	3.357	3.377
$ECR_{APPROVED}$		3.239	3.251
$ECR_{PROPOSED-APROVED}$		0.118	0.125
i - Variation due to Change in Price/GCV of Coal		0.008	0.006
ii - Variation due to Change in Fuel Mix of Coal		0.043	0.050
iii - Variation due to transit loss		0.045	0.047
iv- Variation due to claim of sp. Fuel oil consumption of 1 ml/kWh		0.022	0.022

47. As can be seen from the above Table, the overall increase in the ECR for FY 2019-20 compared to approved is 11.8 Paise/kWh in Unit 2 and by 12.5 Paise/kWh in Unit 3 respectively. As illustrated above, it is mainly due to (i) variations in GCV and price of approved coal impacting ECR by 0.8 Paise/kWh in Unit 2 and 0.6 Paise/kWh in Unit 3 which is an ongoing phenomenon and uncontrollable for any Generators. (ii) Due to change in fuel mix impacting ECR by 4.3 Paise/kWh in Unit 2 and 5.0 Paise/kWh in Unit 3 owing to delay in commencement of SHAKTI Coal for reasons beyond the control of Tata Power as stated above. (ii) Due to higher transit loss in washed category of coal impacting ECR by 4.5 Paise/kWh in Unit 2 and 4.7 Paise/kWh in Unit 3 which as discussed above is because of uncontrollable factors and (iv) Due to claim of Normative S.O.C of 1 ml/kWh as per Regulation impacting ECR by 2.2 Paise/kWh in each Unit 2 and Unit 3.

48. In view of above submission, the Petitioner most humbly submits that Tata Power has acted prudently while seeking commencement of supply under SHAKTI allocations to comply with its obligation as proposed earlier in the APR filings and considering the requirements of the Distribution Licensee and, thus, most humbly prays before this Hon'ble Commission to kindly approved the proposed fuel mix and proposed ECR for the FY 2019-20 for Unit 2 and Unit 3.

APR for FY 2020-21:

Query 11

49. **There is large variation in O&M Expenses between Unit-II (Rs. 57.07 Crore) and Unit-III (Rs. 48.48 Crore). The Petitioner is required to substantiate the same considering the facts that both the Units are similar in size, at same location and of same vintage.**

Reply:

50. It is submitted that significant variation in actual O & M Expenses between Unit 2 & 3 is primarily because of difference in Normative Repair and Maintenance ('R & M') Expenses and the Normative Expenses towards HO & SS Expenses as shown in the following table:

O&M Expenses for FY 2020-21 - Unit 2 & 3 (In Rs. Crore)			*Diff*
Particulars	Unit 2	Unit 3	
Staff Expenses	**8.70**	**8.70**	**0.00**
Employee Expenses w/o Terminal Liabilities	*8.45*	*8.45*	0.00
Terminal Liabilities	*0.25*	*0.25*	0.00
R&M Expenses	**21.94**	**15.66**	**6.28**
A&G Expenses	**22.37**	**20.34**	**2.03**
Ash Disposal Expenses	*5.00*	*4.87*	0.13
HO & SS Expense	*11.53*	*10.11*	1.42
Other A&G Expense	*5.51*	*5.04*	0.47
Application Fees & Publication Expenses	*0.33*	*0.32*	0.01
Raw Water Expenses	*2.33*	*2.12*	0.21
Capital Spares	*1.17*	1.11	0.07
Total O&M Expenses	**56.51**	**47.92**	**8.59**

51. As stated earlier, variation in R & M expenses in Unit # 2 & 3 may occur due to various reasons, viz, shutdown schedule, any major repair activity in any unit executed as & when required in a financial year and hence R&M expenditure may not follow any consistent trend and comparing the same may not be correct. In particular, in case of Unit 2&3 annual shutdown has been generally taken in alternate years and, hence, R&M expenses in the Unit having annual shutdown in a particular year are higher than the other Unit.

Query 12

52. **It is observed that coal is sourced from different coal sources having different GCV's and landed costs. The Petitioner is required to provide the justification for the deviation from the approved cost and purchase plan as per the earlier Order approved by the Commission.**

Reply

53. It is submitted that Tata Power has provided an appropriate justification for deviation from the approved coal procurement plan in its APR FY 2020-21 Petition under Section E.2 filed before the Hon'ble Commission on 1st January 2021. Tata Power, during it's submission of Compliance of Directives for Q1&Q2 of FY 2020-21 dated 30.09.2020 & 04.12.2020, had already informed Hon'ble Commission about the deviation of actual coal consumption plan than approved. Reasons for deviation from approved fuel mix are reproduced below for ready reference.

54. It is submitted that in the Additional Affidavit dated 26.12.2019 to MTR Petition, Tata Power proposed Coal Mix considering lower PLF of about 70% each for Unit 2 and Unit 3 in wake of likely outage required for installation and commissioning of FGD System for Jojobera Unit 2 & 3 both in FY 2020-21. While projecting coal mix, full quantum of coal allocated under SHAKTI scheme was considered and balance was envisaged to be met through Middling Coal from collieries of West Bokaro. However, while deciding the MTR Petition, Hon'ble Commission did not consider the proposed Additional Capitalization for the FGD System and consequently revised the PLF to the level upwards to what was approved in the MYT Order dated 19.02.2018 for FY 2020-21, i.e., 79.05% for Unit 2 and 85% for Unit 3. This required corresponding increase in Middling Coal as Shakti coal was already exhausted and, hence, change in fuel mix. However, while approving the provisional energy charge rate and energy charges for FY 2020-21, the Hon'ble Commission considered the coal mix as proposed in the petition. This implies that with proposed Coal mix at higher PLF, coal quantity required to be sourced from SHAKTI allocation would go beyond the allocated quantum which is not possible and, hence, revised coal mix needs to be computed in such a manner that Coal under the SHAKTI Scheme remains maximum upto the allocated quantity, subject to its availability, and balance requirement may be met through middling coal.

55. In view of the above, coal mix proposed in the MTR Petition, approved in the MTR Order and proposed revised coal mix for Unit 2 and Unit 3 for FY 2020-21 is summarized in the Table below for kind perusal and consideration of the Hon'ble Commission. ECR as per revised fuel mix has been worked out for the purpose of correct comparison between the actual/projection vis-à-vis initial Coal Plan.

Proposed Revised Fuel Mix of MTR Order for Unit # 2

Unit 2	April'20 to March'21				
Type	Proposed in Petition		Approved	Proposed correction in Coal Quantum and Mix as approved in MTR Order	
	Total Coal Quantum (a+b)	Coal Mix Proposed in the Petition	Coal Mix Approved	Coal Quantum	Proposed Revised Fuel Mix
Col->	1	2	3	4	5
Middling	273700	54.31%	54.30%	330433	58.93%
MCL [Shakti 2]	92157	18.29%	18.29%	92157	16.44%
CCL [Shakti 2]	95728	18.99%	19.00%	95728	17.07%
ECL [Shakti 2]	42408	8.41%	8.42%	42408	7.56%
Total	**503993**	**100.00%**	**100.00%**	**560726**	**100.00%**

Proposed Revised Fuel Mix of MTR Order for Unit # 3

Unit 3	April'20 to March'21				
Type	Proposed in Petition		Approved	Proposed correction in Coal Quantum and Mix as approved in MTR Order	
	Total Coal Quantum (a+b)	Coal Mix Proposed in the Petition	Coal Mix Approved	Coal Quantum	Proposed Revised Fuel Mix
Col->	1	2	3	4	5
Middling	275126	54.44%	54.37%	371666	61.74%
MCL [Shakti 2]	92157	18.23%	18.26%	92157	15.31%
CCL [Shakti 2]	95728	18.94%	18.97%	95728	15.90%
ECL [Shakti 2]	42408	8.39%	8.40%	42408	7.05%
Total	**505419**	**100.00%**	**100.00%**	**601959**	**100.00%**

56. From the above Table, it can be seen that in both the Tables that in column No. 1 and in Column No 4 the quantity shown against MCL, CCL and ECL Shakti Round 2 Coal is the maximum available quantity after netting off normative transit loss and accordingly the balance quantity has been shown under Middling Coal and Coal mix was worked out at

proposed and approved PLF. However, Hon'ble Commission has relied upon the proposed coal mix which was worked out at lower PLF considering the maximum quantity to be supplied under SHAKTI Round 2 coal and the same would not be applicable at higher PLF. It needs to be revised since any increase in PLF was required to be met through Middling/alternative Coal only as maximum quantity under SHAKTI has already been accounted for. Therefore, in our humble view, the approved coal mix would have been equal to mix as shown in column 5 in the above Table and the same has been considered to analyze the variations in actual/projection of coal mix for FY 2020-21 in place of that approved in MTR Order.

57. With respect to actual/projection of coal mix for 2020-21, it is submitted that the same has been computed considering actual coal consumption up to the month of October'20 and projected coal consumption for the remaining months. Projected coal requirements have been calculated considering the projected generation during these months, coal supply from existing sources and fresh tie-up under SHAKTI Round 3, the terms and conditions of FSAs and optimum coal mix to optimize the Energy Charges for FY 2020-21. As per the terms and conditions of FSAs pertaining to SHAKTI Coal, Penalty is applicable in case total offtake is below 75% of the Annual Contracted Quantity (ACQ) and incentive is required to be paid in case offtake is more than 90% of the ACQ. Accordingly, taking above into account SHAKTI Coals viz, MCL, CCL and ECL under Round 2 and CCL under Round 3 have been considered with maximum as 90% of the Monthly Coal Allocations. The balance coal requirements for the month is met through Middling Coal. However, in case the when the monthly coal requirement is lower, then the coal requirement is met through available coal keeping cost into consideration. However, these projections shall depend upon the availability of coal, rakes and other unforeseen situations which are beyond the control of the Petitioner and, hence, the Petitioner shall inform Hon'ble Commission about the variations and shall present the overall variations during the true-up exercise for kind consideration of the Hon'ble Commission.

58. With regard to actual coal consumption from April to October'20, it is submitted that as elaborated in true-up sections, because of following reasons (i) lower demand by Distribution Licensee, (ii) Restrictions imposed by Central and State governments due to COVID-19 , (iii) high stock availability and (iv) limitations of Manpower, Tata Power was constrained to inform subsidiaries of coal companies not to supply coal for Tata Power Jojobera Power Plants on 23.03.2020 (Copy of the Letters is already enclosed as *ANNEXURE R12*). Due to similar situation in month of April and May'20, deferment of coal supply under SHAKTI allocations was further requested to Coal Companies for these months. Copies of the Letters are enclosed as **ANNEXURE R14** for kind perusal of Hon'ble

Commission. In view of above constraints, Tata Power had to mainly rely upon already available coal stocks of 2019-20 mainly Middling, Tailing, Reject, 2 Product and E-auction coals initially. Subsequently, coal received under SHAKTI allocations, earlier allocated e-auction coal from ECL, Middling coal along with existing coals stocks have been used till October'20 for meeting the coal requirements. Report on Fuel Mix uptill June'20 was also submitted to Hon'ble Commission on 30.09.2020 and same is enclosed as Annexure P23. It is requested before this Hon'ble Commission to kindly refer the same.

59. It is further submitted that Tata Power participated in SHAKTI Round 3 auction held on 11.05.2020 and was successfully awarded a quantum of 5,77,100 Tons provisionally from CCL at a levelized Discount of 7 paise per unit in tariff for units generated from such coal. The FSA got signed on 05.10.2020 between Tata Power and CCL whereas the tripartite agreement with third party agency, seller and buyer for coal quality monitoring was executed on 19th October 2020. Accordingly, allocation under CCL Round 3 has also been considered from month of November in the manner as explained in the above paragraphs. With commencement of such supply, the benefits of economical coal including discount of 7 paise per unit as per SHAKTI scheme has also been considered while working out energy charges for 2020-21.

60. It is re-iterated that deviations as summarized in the Table below are due to factors as explained in above paragraphs and are beyond the control of Tata Power and, thus, the Petitioner requests this Hon'ble Commission to consider the projected fuel mix for the 2020-21 including the GCV and Landed Price (at Normative transit Loss) in terms of Regulation 6.13 (c) and other applicable Regulations of GTR 2015. For APR of 2020-21, projection of GCV and Landed Price of CCL Shakti Round 3 coal has been considered similar to CCL Round 2 Coal.

Projected Coal Parameters for FY 2020-21- Unit # 2

	Fuel Mix (%)		**GCV (kCal/Kg)**			**Landed Price (Rs/MT)**		
Particulars	**Estd.**	**Approved by Hon'ble Commission**	**Estd.**	**Approved by Hon'ble Commission**	**Diff**	**Estd.**	**Approved by Hon'ble Commission**	**Diff**
Middling Coal	17.35%	58.93%	3861.50	4057.58	(196)	4230.82	4388.51	(158)
ECL [e-auction] Coal	9.97%		5289.78		5290	6110.00		6110
BCCL [e-auction] Coal	3.87%		4312.19		4312	5483.08		5483

2 Product Coal	0.67%		2768.49		2768	3103.00		3103
Tailing (Road) Coal	4.29%		4190.41		4190	4362.00		4362
WB Reject Coal	2.33%		2723.15		2723	2713.00		2713
ECL [Shakti 2] Coal	6.97%	7.56%	5093.59	4848.00	246	5517.61	5441.29	76
CCL [Shakti 2] Coal	16.63%	17.07%	3915.94	3250	666	3482.87	2788.49	694
CCL [Shakti 2] WIV Coal	1.94%		5266.66		5267	4107.16		4107
MCL [Shakti 2] Coal	12.60%	16.44%	3121.06	2950.00	171	2568.63	2723.52	(155)
CCL [Shakti 3] Coal	23.37%		3915.94		3916	3482.87		3483
Wt. Avg			3128.13	3797.45	(669)	3194.07	3921.33	(727)

Projected Coal Parameters for 2020-21 - Unit # 3

	Fuel Mix (%)		**GCV (kCal/Kg)**			**Landed Price (Rs/MT)**		
Particulars	**Estd.**	**Approved by Hon'ble Commission**	**Estd.**	**Approved by Hon'ble Commission**	**Diff**	**Estd.**	**Approved by Hon'ble Commission**	**Diff**
Middling Coal	14.29%	61.74%	3859.13	4062.69	(204)	4215.88	4389.01	(173)
ECL [e-auction] Coal	2.50%		5284.58		5285	6110.00		6110
BCCL [e-auction] Coal	4.31%		4288.38		4288	5614.36		5614
2 Product Coal	0.77%		2768.49		2768	3103.00		3103
Tailing (Road) Coal	4.93%		4190.41		4190	4362.00		4362
WB Reject Coal	4.12%		2723.15		2723	2713.00		2713
ECL [Shakti 2] Coal	13.54%	7.05%	5026.62	4848.00	179	5439.20	5441.29	(2)
CCL [Shakti 2] Coal	14.02%	15.90%	3912.15	3250.00	662	3553.89	2788.49	765
CCL [Shakti 2] WIV Coal	0.53%		5119.35		5119	4070.97		4071
MCL [Shakti 2] Coal	20.38%	15.31%	3106.71	2950.00	157	2630.09	2723.52	(93)

CCL [Shakti 3] Coal	20.61%		3912.15		3912	3553.89		3554
Wt. Avg			3097.80	3818.43	(721)	3140.07	3953.64	(814)

61. Tata Power hereby humbly submits that Hon'ble Commission considering the variations in the coal mix compared to what had been approved in the MYT Ordre had directed to submit the quarterly report with regard to variations in Coal Mix compared to what had been approved along with reasons for the same. Petitioner in compliance of the same is submitting quarterly reports. However, it is submitted that with commencement of SHAKTI Coal for Unit 2 &3, the variations in the actual coal mix has come down. With SHAKTI coal in place significant variations is not expected and, hence, it is most humbly submitted before the Hon'ble Commission that earlier direction of quarterly submission may kindly be dispensed with and it may be permitted to submit such variations, if any, at the time of APR Petition.

MYT Petition for FY 2021-22 to FY 2025-26:

Query 13

62. **The Petitioner is required to provide the approval of Competent Authority for the capital expenditure/scheme proposed for each year of the Control Period as per MYT Regulations.**

Reply:

63. It is submitted that Tata Power vide its additional Affidavit dated 16.01.2021 has submitted the Detailed Project Report (DPRs) for following schemes as proposed for the Control Period FY 2022-26 alongwith approval of the Competent authority for the proposed schemes at Appendix 11 thereof. The same is reannexed herewith as **ANNEXURE R15** for kind reference of the Hon'ble Commission.

I. Ash Pipe Line
II. Bulldozer for CHP
III. Control Room AC
IV. BFP De-staging
V. Electrical Actuator
VI. Multi-layered Security Solution
VII. Oil Centrifuge
VIII. Turbine Parting Plane Bolts and Coupling Bolts
IX. Weighbridge

X. Workshop Machine Tools, Condition Monitory Tools & Mobile Environmental Dust Extractor

64. It is submitted that Subsidiary Intelligence Bureau, (MHA), GOI had visited Jojobera Power Plant to evaluate security set up at jojobera Power plant. After assessment, the concerned authority has submitted its report on 10.02.2021. Report is annexed herewith and marked as **ANNEXURE R16** for kind perusal of the Hon'ble Commission. Presently we are evaluating the report and, therefore, seeks liberty of the Hon'ble Commission to approach Hon'ble Commission in case any additional work is required to be done to comply with direction contained in above report.

Query 14

65. **As per MYT Regulations, the Petitioner is required to submit Human Resource Plan with manpower planning including details of the estimated year wise manpower addition and retirements for the Control Period to run the power plant efficiently and effectively. The Petitioner is required to furnish the same along with existing arrangement/manpower including Contractual employees.**

Reply:

66. The manpower arrangement as per the employee levels/grades for the Period 2015-16 has been presented in the Table below for the kind reference of the Hon'ble Commission.

Particulars	Tata Power Jojobera Units 1-4				
	2015-16	2016-17	2017-18	2018-19	2019-20
MB Level	1	1	1	0	0
MC Level	1	1	1	4	4
MD Level	15	16	13	13	14
ME Level	124	120	116	114	113
Union Employees	44	43	43	43	43
Contract Employee	0	0	0	0	5
Grand Total	185	181	174	174	179

67. It is humbly submitted that Tata Power does not foresee much variation in the Manpower strength over the upcoming Control Period and, hence, it has proposed to continue with the existing manpower arrangement for next control period i.e FY 2021-22 to FY 2025-26. In case of any retirement/internal transfer, Tata Power may arrange suitable replacement for the purpose of running the plant hassle-free. In view of above, it is requested before the Hon'ble Commission to kindly consider the present manpower arrangement and proposed manpower cost based on past expenses for next control

period (FY 2021-22 to FY 2025-26). In case of substantial deviation, if any, the Petitioner seeks liberty of the Hon'ble Commission to submit the same with Annual Performance Review and/or True-up Petition.

Query 15

68. **It is observed that the Petitioner has proposed deviation in the Plant Load Factor (PLF) as compared to Clause 16.1 of the MYT Generation Regulations 2020 (normative specified in the MYT Regulations). The Petitioner is required to provide the reason for deviation.**

Reply:

69. It is humbly submitted that the Plant Load Factor (PLF) for the Control Period FY 22-26 has been projected based on the demand projections given by the distribution licensee and also taking into consideration the Operational and Maintenance Plan. It is noteworthy to mention here that PLF of the Units is normally based on the demand of the distribution licensee which further depends upon various external factors which are beyond the control of the Petitioner. The Petitioner, therefore, projected the PLF for the year 2021-22 to 2024-25 in consonance with projection given by Tata Steel Distribution Licensee. In absence of any Projection from the distribution licensee, the PLF for FY 2025-26 has been considered as per projection of FY 2024-25. The projections given by Tata Steel Distribution Licensee is annexed herewith for kind reference of the Hon'ble Commission as **ANNEXURE R17**.
70. In view of above submissions, Petitioner requests before this Hon'ble Commission to kindly consider the given projection for the purpose of MYT.

Query 16

71. **The Petitioner is required to provide the details of the Annual Contracted Quantity (ACQ), GCV and dispatch schedule of coal from each sources under SHAKTI Scheme in the as per the format below along with the proposed fuel mix for the Control period.**

Reply:

72. The requisite details as per prescribed format are presented in the Table below for kind perusal of the Hon'ble Commission:

Source	ACQ	Grade	Dispatch Schedule	GCV U2	GCV U3	Qty Proposed in MYT	Percentage Proposed in MYT
Shakti Round 2							
ECL	85500	G4	90%	5109	5001	76334	90.0%

CCL	193000	G11	90%	3838	3856	172310	90.0%
MCL	185800	G13	90%	3130	3107	165882	90.0%
Sub Total	464300					414527	
Shakti Round 3							
CCL	577100	G11	90%	3838	3856	515235	90.0%

73. It is further submitted that Tata Power has in accordance with Regulation 17.10, 17.11, 17.14 and 17.15 of the Generation Tariff Regulations, 2020 arrived at the initial Base Values of GCV and Base Price of Coal & Secondary Fuel oil for the Control Period FY 2021-22 to 2025-26 by considering actual weighted average values for preceding 3 months viz. Aug'20 to Oct'20. It may be kindly noted that supply of CCL Shakti Round 3 Coal has begun only from month of November, therefore, for the purposes of projection GCV of CCL shakti Round 3 coal has been considered equivalent to GCV of CCL Shakti Round 2 Coal subject to true-up based on actuals.
74. Further, the proposed quantity has been considered at 90% of the ACQ after adjustment of normative transit loss of 0.8%. Such ratio was considered based on past experience and unpredictability of supply from subsidiaries of Coal India Limited. It will not be out of place to mention that in the past it has been observed that for both e-auction/captive/Linkage coal, the availability of Coal from these subsidiaries of CIL has been uncertain/unpredictable and at times the stocks have come to very critical level for which Tata Power had to immediately scout for coal from private washeries/or imported coal to maintain the reliability of the generation. The rakes booked had been pending for very long periods even after making advance payments. Consequently, it not only posed generation reliability issue but also impacted the overall generation cost.
75. In order to substantiate above, summary of source wise ACQ with requisitioned quantity and actual despatch has been presented in the Table below for kind reference.

Coal Source(CIL)	**ACQ**	**Requisitioned Quantity**	**Actual dispatched Quantity**	**%**
FY-18	MCL (FSA)	700000	406995.15	58%
FY-19	MCL (FSA)	700000	336544.91	48%
FY-20 (FSA) Tranche IV	CCL	256100	206449.65	81%
	BCCL	296100	0	0%
	NCL	53600	47617.48	89%
	MCL	37700	15717.33	42%
	ECL	141200	114058.27	81%
FY-20 (FSA) Shakti	ECL	38940	37068.66	95%
FY-20 (e-auction)	ECL	116820	68777.98	59%
	BCCL	105000	105408.77	100%
	MCL	24000	19015.22	79%

76. As can be seen from above, the overall despatch against the requisitioned quantity is mostly lower than 90%. Moreover, incentive is payable on Shakti coal beyond 90% dispatch which may be costlier than the other options like middling or 2Product from West Bokaro mines. Therefore, the Petitioner has considered 90% of the coal allocations under SHAKTI from these subsidiaries for planning purposes though it will endeavour to utilize the coal available from these sources to the maximum extent possible. Balance requirement is projected to be met through middling coal from collieries of West Bokaro being the most reliable source.

Query 17

77. **As per Clause 14.5 of the MYT Generation Regulations, 2020, any additional capitalization proposed during the fag end of the project (at least 5 years before the Useful life or extended Useful life) of the plant need to be submitted with DPR,Cost-Benefit analysis, rate reasonability along with the residual life assessment report of the Project. It is observed that Petitioner's both Units has entered the fag life and therefore the Petitioner is required to provide the above said details for processing the additional capitalisation as proposed in the Petition.**

Reply:

78. It is submitted that residual life study includes extensive study of each equipment which is time consuming and can be only done during the Annual Shutdown (ASD) of the Units. The Petitioner in compliance to the earlier direction of the Commission has done RLA of boiler and turbine of Unit 3 during the ASD carried out recently in January'21. The report will be submitted to the Hon'ble Commission once it is available with the Petitioner. RLA for Electrical equipments and other BOP equipment's for Unit 3 is still in planning stage and is likely to be taken up during ASD Scheduled in FY 2022-23.
79. Similarly, for Unit 2, the RLA for boiler and turbine is projected to be taken-up during ASD for FY 23-24 whereas for the electrical equipments the same is planned to be taken-up during ASD scheduled in FY 2021-22.
80. It is further submitted that Petitioner has to incur substantial cost for carrying out Residual Life Study of critical equipments which are in compliance to directive of the Hon'ble Commission and squarely falls under the purview of statutory expenses and, being non-recurring in nature, were not included in the proposed normative O&M expenses. It is, therefore, humbly requested before the Hon'ble Commission to kindly reimburse the actual expenses incurred towards such RLA study over above the approved normative O&M expenses.

81. The actual expenditure incurred in FY 2020-21 towards carrying out RLA of Boiler and Turbine for Unit 3 is about Rs. 65.78 Lakh (Inclusive of GST) which may kindly be reimbursed to the Petitioner over and above the Normative Expenditure. Purchase Order placed on the party is annexed hereto and marked as **ANNEXURE R18 (colly)**. The same expenditure is further escalated at normal inflation of 10% year on year to estimate the expenditure of Rs. 87.56 Lakh (Inclusive of GST) to be incurred for Unit 2 in FY 2023-24. Similarly, for conducting RLA for electrical equipments of Unit 2 in FY 2021-22, the cost is estimated at Rs. 50 Lakh as shown below, and such cost has been further escalated at 10% to arrive at the estimated cost of Rs. 55 Lakh to be incurred towards RLA for electrical equipments of Unit 3 in FY 2022-23.

Serial No	Life Assessment	Cost	With Tax
1	Generator	1000000	1180000
2	150MVA GT	55000	64900
3	14MVA GT	55000	64900
4	21 Nos. of HT Motors	1050000	1239000
5	HT cables of 33 feeders	660000	778800
6	8 nos. of Distribution Transformers	400000	472000
7	Associated Services (example: Rotor Thread out etc)	--	1200000
Total		--	4999600
Total (Approx)			Rs. 50 Lakh

Hon'ble Commission is requested to consider these additional expenses in respective years subject to true-up on actual basis.

Query 18

82. **The Petitioner is directed to provide the detailed break up of actual O&M Expenses (Employee Expenses, R&M Expenses, A&G Expenses and Head Office Expenses) along with break-up of the Legal/Litigation Expenses for the previous Years (FY 2015-16 to FY 2019-20) duly certified by the Statutory Auditor of the Company as required under Regulation 6.11 of the JSERC MYT Regulations, 2020. The Petitioner is also directed to submit the detail of activities carried out under the above said heads for the period from FY 2015-16 to FY 2019-20.**

Reply:

83. It is humbly submitted that Petitioner in Section F7 of the Petition has in detail discussed about the break-up of O&M expenses and has then computed the projected expenses for upcoming control period in terms of the principles as laid down in the Tariff Regulations, 2020. It is humbly requested before this Hon'ble Commission to kindly refer the section F7 and additional submission made in subsequent paragraphs in respect of Other A&G Expenses while deciding on the projected O&M expenses for MYT. The same is not

repeated herewith for sake of brevity and re-iteration of the same facts. The excel files have also been submitted alongwith the Tariff Petition. However, as directed break-up of O&M expenses for the period FY 2015-16 to FY 2019-20 is enclosed herewith as **ANNEXURE R19** for Unit 2 and **ANNEXURE R20** for Unit 3 for kind consideration of the Hon'ble Commission.

84. However, regarding the breakup of litigation expenses, it is submitted that some legal expenses are incurred at plant level and litigation is mostly handled at the corporate level and the expenses incurred towards it are also booked at the corporate level of the Company. Only the expenses which were booked at plant level have been currently shown separately under the head of litigation expenses as detailed in section 7 of the Petition. The Common expenses at corporate level including litigation expenses are shared among the operating divisions in proportion of revenue of the operating division to the operating revenue of the company. Similar ratio is followed further while sharing such cost among different units within a location. Such prudent allocation has been relied upon by the Statutory Auditors of the company while certifying the accounts of Jojobera Unit 2 and 3 for HO expenses.
85. Tata Power further submits that as per Tariff Regulations, legal/litigations expenses shall be approved as per Jharkhand State Litigation Policy which is applicable only on the agencies of the State Government and same is not applicable on the Petitioner.
86. Further as submitted under query no 6, Repair and Maintenance expenses are mainly expense towards routine and annual maintenance of the machines which include both services and consumables & spares cost. The expenses in accounts have been booked under two Ledgers, namely consumables and services cost (services costs which includes outsourced labour costs that are subject to wage/labour laws) towards various activities carried out during the year. Activities carried out under Routine and Maintenance is annexed herewith and marked as **ANNEXURE R21** for kind reference of the Hon'ble Commission. It may kindly be noted that depending upon the breakdown, outage schedule or because of any other uncontrollable factors the activities may vary year to year in respective Units. Also, the further breakup of the A&G expenses alongwith brief details are enclosed in Annexure R19 and R20 for kind perusal of the Hon'ble Commission. It is humbly submitted that Audited Profit and Loss Account for the year FY 2015-16 to FY 2019-20 has been enclosed and marked as Annexure P17 and Annexure P28 of the main petition. Tata Power humbly requests Hon'ble Commission to kindly refer the same.

Additional Submission related to Other A&G expenses:

87. It is submitted that the Petitioner in line with Tariff Regulations 2020 and for reasons as stated in the Petition has considered the Raw Water Charges, Application Fee/Publication

Expenses, legal expenses, Ash Disposal Expenses and Head Office expenses in separate head beside Other A&G Expenses i.e. A&G Expenses excluding legal and Application& Publication expenses. Ash Disposal Expenses, Water Charges, Application fee and Publication Expenses were estimated with best possible assumptions whereas Head Office expenses, legal expenses and Other A&G expenses were estimated based on the base year expenses which have been computed based on the past year expenses in the manner as prescribed in the Regulations.

88. In the instant Petition, to arrive at the Other A&G expenses for each year from 2015-16 to 2019-20, the Petitioner deducted actual Application fee/Publication expenses and legal expenses for Unit 2 and 3 as these heads were booked in the books under A&G expenses for Unit 2 and 3 and were not directly identifiable in the auditor certified Profit and Loss Account. While doing so, the Petitioner considered the actual Application and publication expenses for Unit 2 and 3 as claimed during the true-up for past years. However, while revisiting the documents, it has been observed that Application and Publication expenses including other advertising cost of Units 2 and 3 has been considered as a common expense to Unit 1 to 4 in books and, accordingly, the allocated cost in books of Unit 2 and Unit 3 is lower than the actual amount being incurred and claimed towards Application fees and Publication Expense in true-up. Thus, the auditor's certificate has allocated lower amount under this head for Units 2 and 3, but in the Petition actual higher amount incurred under Unit 2 and 3 has been deducted to arrive at lower than actual Other A&G Expenses. However, the Petitioner is not correcting and increasing the Other A&G Expenses to maintain consistency of methodology for allocation of expenses.

Query 19

89. **It is observed that the Petitioner has considered the repayment equivalent to depreciation on additional capitalisation only i.e. capitalisation from FY 2011-12 onwards instead of total depreciation (original assets and additional capitalisation) while calculating interest on Loan. The Petitioner is required to provide the reason for deviating from Regulations.**

Reply:

90. is submitted that the interest on Normative loan is claimed and allowed only for Normative Loans pertaining to Additional Capitalizations from FY 2011-12 onwards and the loan on the Assets Capitalised as on COD in both the units has been entirely repaid by the Petitioner. Therefore, only depreciation pertaining to additional capitalisation has been considered equivalent to repayment while computing the Interest on Loan.

91. Further, the Hon'ble Commission while passing the previous tariff orders have noted and accepted the above submission of the Petitioner.

Query 20

92. **It is observed that the Petitioner has projected the Non-Tariff Income (NTI) as nil for each year of the Control period and requested to submit the actuals under different heads at the time of Truing up. The Petitioner is directed to provide the detail break up of actual NTI for the period from FY 2015-16 to FY 2019-20.**

Reply:

93. As sought by the Hon'ble Commission, the breakup of the other income of Unit 2 and Unit 3 for the period FY 2015-16 to FY 2019-20 is summarized in the Table below:

Non-Tariff Income for Unit 2					Rs. Lakh
Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 2019-20
Rental Income from Staff Quarters	0.44	0.40	0.53	0.75	1.16
Liabilities Written Back	5.20	0.00	0.00	-2.58	-0.78
Miscellaneous Revenue	3.63	0.00	0.06	0.04	3.98
Sale of Scrap	22.38	19.89	44.24	51.39	42.18
Interest Income from Employee Loans	0.45	0.45	0.24	0.35	0.34
Total	32.10	20.74	45.07	49.96	46.88

Non-Tariff Income for Unit 3					Rs. Lakh
Particulars	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 2019-20
Rental Income from Staff Quarters	0.44	0.40	0.53	0.75	1.16
Liabilities Written Back	5.20	0.00	0.00	-2.58	-0.78
Miscellaneous Revenue	3.63	0.00	0.06	0.04	3.98
Sale of Scrap	22.38	19.89	44.24	51.39	42.18
Interest Income from Employee Loans	0.45	0.45	0.24	0.35	0.34
Total	32.10	20.74	45.07	49.96	46.88

94. With regard to above, it is humbly submitted that sale of scrap is mostly towards the sale of obsolete or irreparable assets which has to be discarded/decapitalised because there is no future economic benefit which can be derived from these assets. As per extant Regulations, depreciation allowed is limited to 90% of the admitted cost and not the entire cost for the reason that after disposal/sale of these assets after useful life of the asset is over the investor in all likelihood may be able to recover the remaining 10% normative residual value of the admitted cost through scrap sale. In other words, any loss or profit arising after sale of this decapitalized asset after end of the useful life of the asset compared to assumed residual value of 10% is to the generating company. Further, in

case of decapitalization before useful life of the assets, generating company is even not able to recover the allowable depreciation. Therefore, deducting any income arising from such sale in either case would be incorrect.

95. In this regard, it is noteworthy to refer to the judgment of the Hon'ble Tribunal on the issue of '*Loss on account of de-capitalisation of assets - its impact on allowable O&M Expenditure for the period 2004-2009*' in the matter of Talcher Thermal Power Station in Appeal No. 88 of 2007. The said issue relates to recovery of loss on account of decapitalization performed during renovation and modernisation i.e., post useful life of the plant when 90% of cost has been recovered. Relevant part of the judgment is reproduced below which states that loss/profit arising out of decapitalized asset after useful life is to the generating company.

> *"37. Further, as per the policy of the Central Commission, <u>any loss or profit arising out of the de-capitalised assets is to be borne/retained by the Appellant</u>. That being the practice consistently followed by the Central Commission, we do not want to interfere with the same. There is also no Regulation on this aspect favouring the contention raised by the Appellant."*

96. In light of above submissions, it is humbly submitted that sale of scrap may kindly not be reduced from ARR. Doing so will be a double hit to the Generating company. Moreover, in case of other items as mentioned in the above table, net income (income net off expenses), if any, only be considered as part of NTI and not the entire income which shall be known only at the time of true-up.

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Apr-19 12:00:00 AM TO: 01-May-19 12:00:00 AM

Report Generated on : 01-May-19 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1375456140	0	1417962532	0	42506392	0
PML- GEN # 2 (Check)	3236963342	0	3297579172	0	60615830	0
PML- GEN # 3 (CHECK)	4179709128	132	4243666385	132	63957257	0
PML- GEN # 4 (CHECK)	10902496512	23366	10977854332	23366	75357820	0
PML- GEN # 5	6744871142	188	6826300762	188	81429621	0
				Total Generation (PML)	323866919	
PML- GEN # 1 (G1B)	7814157991	340	7856251064	340	42093073	0
PML- GEN # 2 (G2B)	13047401743	442	13107280690	442	59878948	0
PML- GEN # 3 (G3B)	13320726894	530	13384482835	530	63755941	0
PML GEN # 4 (G4B)	10956403107	375	11032157056	375	75753949	0
PML GEN # 5 (G5B)	6744219775	1507	6825504886	1507	81285111	0
				Total Generation (Alpha)	322767021	
EXPORT						
PML- LINE # 1	8214999499	214369	8256202559	214369	41203060	0
PML- LINE # 2	0	0	0	0	41203060	0
PML- LINE # 3	7548894272	106130	7588120709	106130	39226437	0
PML- LINE # 4	2589939005	25	2627520964	25	37581959	0
PML- LINE # 5	3934112726	9570885	3971706477	9570885	37593752	0
PML- LINE # 6	1388534031	752	1405468007	752	16933976	0
PML- LINE # 7	816804800	127713384	822990912	127713384	6186112	0
PML- LINE # 8	713838080	38821884	720263552	38821884	6425472	0
PML- LINE # 9	2384619067	40	2416258311	40	31639245	0
				Total 132 KV export	257993071	0
PML- 33 kV ST1	2416840319	2573	2432338514	2573	15498195	0
PML- 33 kV ST2	2092800540	8755	2093339840	8755	539300	0
PML- 33 kV ST3	173143413	148	173143413	148	0	0
				Total 33 KV export	16037495	0
PML- 132 kV ST1	2587331882	663969	2602608862	663969	15276980	0
PML- 132 kV ST2	2175259001	375613	2177253386	375613	1994385	0
PML- 132 kV ST3	1618018063	1932270	1636952972	1932270	18934909	0
				ST 132 KV total	36206274	0
PML- 6.6 kV C1 (T1C)	17049465	866	17049465	866	0	0
PML- 6.6 kV C2 (T2C)	42617456	93783	44197444	93783	1579988	0
PML- 6.6 kV C5 (T3C)	82946352	186	85707692	186	2761340	0
				Total 6.6 KV station load	4341328	0
PML- 132 kV GT1 (G1A)	6870712872	8387	6908693677	8387	37980805	0
PML- 132 kV GT2 (G2A)	0	46659	0	46659	10997270	0
PML- 132 kV GT3 (G3A)	12192112839	2873	12250658928	2873	58546089	0
PML- 132 kV GT4 (G4A)	7917899233	17972	7986838935	17972	68939702	0
PML- 132 kV ICT1 (G5A)	4401392710	391	4475819456	391	74426745	0
				Total GT export at 132 KV	250890612	0
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2768901	10	2782277	10	13376	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49480050	380195	49489910	380195	9860	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3294521	73	3401670	73	107149	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9040144	52	9122148	52	82004	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6076554	349	6167915	349	91361	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1615999	91	1682341	91	66342	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	9973054	35514523	10201673	35514523	228619	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	12515353	15291909	13261564	15291909	746211	0
PML - 6.6 KV C1to C8 (TIE U5) T9	32948541	4012928	33086236	4012928	137695	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	32522115	325	32649695	325	127580	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3450864	30	3450864	30	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3227112	8	3227112	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	78135436	3	80245245	3	2109809	0
PML - 6.6 KV U1B (Unit I/C U1)	98239302	99	100122892	99	1883590	0
PML - 6.6 KV U2A (Unit I/C U2)	81112622	31	83426820	31	2314198	0
PML - 6.6 KV U2B (Unit I/C U2)	36059453	104	37642941	104	1583488	0
PML - 6.6 KV U3A (Unit I/C U3)	54333404	28	56862424	28	2529020	0
PML - 6.6 KV U3B (Unit I/C U3)	27574890	213	29728605	213	2153715	0
PML - 6.6 KV U4A (Unit I/C U4)	86411774	55	89697543	55	3285769	0
PML - 6.6 KV U4B (Unit I/C U4)	60763145	62	63773261	62	3010116	0
PML - 6.6 KV U5A (Unit I/C U5)	8715518	9	1723288	9	3007770	0

PML - 6.6 KV U5B (Unit I/C U5)	11473424	7	4920360	7	3446936	0
C1 - BPRS 6.6 KV Feeder F1	[illegible]	0	[illegible]	0	0	0
BPRS - Jemco reveocery F2	[illegible]	0	[illegible]	0	1170	0
				Total consumption by unit bus from Station	635367	0
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-1170	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1107952		1124859		16907000	
Cummins feeder at Cummins end	2159		4373		2214000	
Lafarge feeder at Lafarge end	34861		48361		13500000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1065883	1091486	30723600	MF 1200000		
Lin # 9 SECURE METER Reading	2464.94	2530.92	65980000	MF 1000000		

Reactive Generation Readings

	KVARH	MVAR			
Generator # 1 reactive	24340224	33.81	Generator # 4 reactive	35186688	48.87
Generator # 2 reactive	28703744	39.87	Generator # 5 reactive	29673472	41.21
Generator # 3 reactive	33348096	46.32			

Compressor Readings

	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	12959096	2	13140165	2	181069	0
Air Comp 1B (U1B Bus)	12819617	2	13003572	2	183955	0
Air Comp 2A (U2A Bus)	78921551	20	78921551	20	107524	0
Air Comp 2B (C3 Bus)	16831423	8	17170491	8	339068	0
Air Comp 2C (U3A Bus)	71217308	0	71539823	0	322515	0
Air Comp 4A (U 4A Bus)	16339368	1680	16581895	1680	242527	0
Air Comp 4B (U 4B Bus)	25226219	2	25670568	2	444349	0
Air Comp 5B (U5B Bus)	33112379	3727	33550638	3727	438259	0
				Toatal Comp Load	2259266	

CLPH unit # 1 Readings

CLPH INC 1	9356.59	9525.91	169317	
CLPH INC 2	6976.62	7064.62	88000	
CT FAN BUS A SIDE	3450.50	3523.95	73452	
CT FAN BUS B SIDE	3483.83	3556.26	72432	
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)			111433	

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Apr-19 12:00:00 AM TO: 01-May-19 12:00:00 AM

Report Generated on : 01-May-19 12:00:00 AM

Total Station Load (C1 + C2+ C5)	4342498	Total station to unit tie load	635367	3707131 < allocated load
Total Compressor load on units	1920198	Total common load on CLPH bus for allocation	111433	

	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	42093073	59878948	63755941	75753949	81285111	322767021
Unit Load	4112268	4256960	5209851	6750409	6942416	27271904
Compressor Load allocation	250419	356230	379295	450674	483579	1920198
CLPH load allocation	14532	20673	22011	26154	28063	111433
Corrected Unit Load	3900763	4526339	5288643	6540360	7015800	27271904
% Unit Consumption	9.27	7.56	8.30	8.63	8.63	8.45%
Allocated Station Load	483459	687738	732267	870070	933598	3707131
Station to unit consumption	23236	189153	157703	0	265275	635367
Total station load for each unit	506695	876891	889970	870070	1198873	4342498
% station load	1.20%	1.46%	1.40%	1.15%	1.47%	1.35%
Total Aux. consumed by unit	4407457	5403230	6178613	7410430	8214673	31614402
% of Aux. Consumption	10.47%	9.02%	9.69%	9.78%	10.11%	9.79%
Deemed PLF	98.94%	80.81%	87.06%	100.00%	99.51%	
P L F %	86.61%	69.30%	73.79%	87.68%	94.08%	81.88%

Tisco Representative	TPCL Representative
Name: Mr. C N S Gautam & Mr Arif	Name: Mr.Boban Chacko & Ms Usha Agrawal/ Ms. Suchismita Nayak
Signature	Signature
Date & Time 01-May-19 12:00:00 AM	Date & Time 01-May-19 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus 0.6

% of generation as transformer losses is considered as unit load. Total station load is caluclulated from the station I/C of C1,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-May-19 12:00:00 AM TO: 31-May-19 12:00:00 AM

Report Generated on : 01-Jun-19 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1417962532	0	1466098572	0	48136040	0
PML- GEN # 2 (Check)	3297579172	0	3375688074	0	78108902	0
PML- GEN # 3 (CHECK)	4243666385	132	4325430873	132	81764488	0
PML- GEN # 4 (CHECK)	10977854332	23366	11064963782	23366	87109451	0
PML- GEN # 5	6826300762	188	6915187752	188	88886990	0
				Total Generation (PML)	384005869	
PML- GEN # 1 (G1B)	7856251064	340	7904059464	340	47808400	0
PML- GEN # 2 (G2B)	13107280690	442	13185061597	442	77780907	0
PML- GEN # 3 (G3B)	13384482835	530	13465974694	530	81491859	0
PML GEN # 4 (G4B)	11032157056	375	11119680152	375	87523097	0
PML GEN # 5 (G5B)	6825504886	1507	6914234079	1507	88729194	0
				Total Generation (Alpha)	383333456	
EXPORT						
PML- LINE # 1	8256202559	214369	8306277420	214369	50074861	0
PML- LINE # 2	0	0	0	0	41203060	0
PML- LINE # 3	7588120709	106130	7636271922	106130	48151214	0
PML- LINE # 4	2627520964	25	2674348766	25	46827802	0
PML- LINE # 5	3971706477	9570885	4014359859	9570885	42653382	0
PML- LINE # 6	1405468007	752	1427421505	752	21953498	0
PML- LINE # 7	822990912	127713384	829413184	127713384	6422272	0
PML- LINE # 8	720263552	38821884	726921344	38821884	6657792	0
PML- LINE # 9	2416258311	40	2451939063	40	35680752	0
				Total 132 KV export	299624631	0
PML- 33 kV ST1	2432338514	2573	2450456213	2573	18117699	0
PML- 33 kV ST2	2093339840	8755	2093339840	8755	0	0
PML- 33 kV ST3	0	0	0	148	0	148
				Total 33 KV export	18117699	148
PML- 132 kV ST1	2602608862	663969	2620513695	663969	17904834	0
PML- 132 kV ST2	2177253386	375613	2178781732	375613	1528347	0
PML- 132 kV ST3	1636952972	1932270	1659075698	1932270	22122727	0
				ST 132 KV total	41555907	0
PML- 6.6 kV C1 (T1C)	17049465	866	17049465	866	0	0
PML- 6.6 kV C2 (T2C)	44197444	93783	45860603	93783	1663159	0
PML- 6.6 kV C5 (T3C)	85707692	186	88305777	186	2598085	0
				Total 6.6 KV station load	4261244	0
PML- 132 kV GT1 (G1A)	6908693677	8387	6952134464	8387	43440787	0
PML- 132 kV GT2 (G2A)	0	46659	0	46659	10997270	0
PML- 132 kV GT3 (G3A)	12250658928	2873	12325635476	2873	74976547	0
PML- 132 kV GT4 (G4A)	7986838935	17972	8066714743	17972	79875808	0
PML- 132 kV ICT1 (G5A)	4475819456	391	4557233625	391	81414169	0
				Total GT export at 132 KV	290704582	0
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2782277	10	2782277	10	0	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49489910	380195	49489910	380195	0	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3401670	73	3407007	73	5337	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9122148	52	9128516	52	6368	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6167915	349	6167915	349	0	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1682341	91	1682341	91	0	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	10201673	35514523	10502075	35514523	300402	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	13261564	15291909	14012714	15291909	751150	0
PML - 6.6 KV C1to C8 (TIE U5) T9	33086236	4012928	33245053	4012928	158817	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	32649695	325	32791076	325	141381	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3450864	30	3459179	30	8315	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3227112	8	3234678	8	7566	0
PML - 6.6 KV U1A (Unit I/C U1)	80245245	3	82491622	3	2246377	0
PML - 6.6 KV U1B (Unit I/C U1)	100122892	99	102062726	99	1939834	0
PML - 6.6 KV U2A (Unit I/C U2)	83426820	31	86558131	31	3131311	0
PML - 6.6 KV U2B (Unit I/C U2)	37642941	104	39887331	104	2244390	0
PML - 6.6 KV U3A (Unit I/C U3)	56862424	28	60254255	28	3391831	0
PML - 6.6 KV U3B (Unit I/C U3)	29728605	213	32188567	213	2459962	0
PML - 6.6 KV U4A (Unit I/C U4)	89697543	55	92563767	55	2866224	0
PML - 6.6 KV U4B (Unit I/C U4)	63773261	62	67899790	62	4126529	0
PML - 6.6 KV U5A (Unit I/C U5)	1723288	9	4851094	9	3127806	0

PML - 6.6 KV U5B (Unit I/C U5)	4920360	7	8824369	7	3904010	0
C1 - BPRS 6.6 KV Feeder F1	653.10	0	653.10	0	0	0
BPRS - Jemco reveocery F2	1601.60	0	1602.83	0	1230	0
Total consumption by unit bus from Station					327784	0
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-1230	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1124859		1145858		20999000	
Cummins feeder at Cummins end	4373		6637		2264000	
Lafarge feeder at Lafarge end	48361		62837		14476000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1091486	1109788	21962400	MF 1200000		
Lin # 9 SECURE METER Reading	2530.92	2566.04	35120000	MF 1000000		
Reactive Generation Readings						
	KVARH	MVAR				
Generator # 1 reactive	27020544	36.32	Generator # 4 reactive		42555392	57.20
Generator # 2 reactive	40186880	54.01	Generator # 5 reactive		26234368	35.26
Generator # 3 reactive	43181568	58.04				

Compressor Readings						
	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	13140165	2	13262558	2	122393	0
Air Comp 1B (U1B Bus)	13003572	2	13147247	2	143675	0
Air Comp 2A (U2A Bus)	78921551	20	78921551	20	107524	0
Air Comp 2B (C3 Bus)	17170491	8	17400007	8	229516	0
Air Comp 2C (U3A Bus)	71539823	0	71935433	0	395610	0
Air Comp 4A (U 4A Bus)	16581895	1680	16780453	1680	198558	0
Air Comp 4B (U 4B Bus)	25670568	2	26179307	2	508739	0
Air Comp 5B (U5B Bus)	33550638	3727	34048499	3727	497861	0
Toatal Comp Load					2203876	
CLPH unit # 1 Readings						
CLPH INC 1	9525.91		9705.40		179490	
CLPH INC 2	7064.62		7159.04		94425	
CT FAN BUS A SIDE	3523.95		3599.90		75951	
CT FAN BUS B SIDE	3556.26		3632.02		75754	
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					122210	

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-May-19 12:00:00 AM TO: 31-May-19 12:00:00 AM

Report Generated on : 01-Jun-19 12:00:00 AM

Total Station Load (C1 + C2+ C5)	4262474	Total station to unit tie load	327784		3934690	< allocated load
Total Compressor load on units	1974360	Total common load on CLPH bus for allocation			122210	
	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	47808400	77780907	81491859	87523097	88729194	383333456
Unit Load	4367613	5842386	6515312	7517892	7564190	31807393
Compressor Load allocation	246237	400611	419724	450788	457000	1974360
CLPH load allocation	15242	24797	25980	27903	28288	122210
Corrected Unit Load	4240814	6160270	6565406	7289286	7551617	31807393
% Unit Consumption	8.87	7.92	8.06	8.33	8.51	8.30%
Allocated Station Load	490725	798375	836465	898373	910752	3934690
Station to unit consumption	0	11705	0	15881	300198	327784
Total station load for each unit	490725	810080	836465	914254	1210950	4262474
% station load	1.03%	1.04%	1.03%	1.04%	1.36%	1.11%
Total Aux. consumed by unit	4731538	6970350	7401872	8203539	8762567	36069867
% of Aux. Consumption	9.90%	8.96%	9.08%	9.37%	9.88%	9.41%
Deemed PLF	100.00%	99.56%	100.00%	99.69%	99.53%	
P L F %	95.20%	87.12%	91.28%	98.03%	99.38%	94.11%

Tisco Representative		TPCL Representative	
Name: Mr. C N S Gautam & Mr Arif		Name: Mr.Boban Chacko & Ms Usha Agrawal/ Ms. Suchismita Nayak	
Signature		Signature	Usha Agrawal
Date & Time	01-Jun-19 12:00:00 AM	Date & Time 1/6/19	01-Jun-19 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load . for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C1,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.**Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.**

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Jun-19 12:00:00 AM TO: 01-Jul-19 12:00:00 AM

Report Generated on : 01-Jul-19 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1466098572	0	1507750317	0	41651745	0
PML- GEN # 2 (Check)	3375688074	0	3440955012	0	65266938	0
PML- GEN # 3 (CHECK)	4325430873	132	4394599265	132	69168392	0
PML- GEN # 4 (CHECK)	11064963782	23366	11140720032	23366	75756250	0
PML- GEN # 5	6915187752	188	6997189290	188	82001538	0
				Total Generation (PML)	333844863	
PML- GEN # 1 (G1B)	7904059464	340	7945386860	340	41327396	0
PML- GEN # 2 (G2B)	13185061597	442	13249972999	442	64911402	0
PML- GEN # 3 (G3B)	13465974694	530	13534901298	530	68926604	0
PML GEN # 4 (G4B)	11119680152	375	11195689127	375	76008975	0
PML GEN # 5 (G5B)	6914234079	1507	6996091123	1507	81857044	0
				Total Generation (Alpha)	333031421	
EXPORT						
PML- LINE # 1	8306277420	214369	8349645408	214369	43367989	0
PML- LINE # 2	0	0	0	0	43938252	0
PML- LINE # 3	7636271922	106130	7678596830	106130	42324908	0
PML- LINE # 4	2674348766	25	2713812196	25	39463430	0
PML- LINE # 5	4014359859	9570885	4046897142	9570885	32537283	0
PML- LINE # 6	1427421505	752	1449672963	752	22251459	0
PML- LINE # 7	829413184	127713384	835763712	127713384	6350528	0
PML- LINE # 8	726921344	38821884	733535424	38821884	6614080	0
PML- LINE # 9	2451939063	40	2480507089	40	28568026	0
				Total 132 KV export	285415954	0
PML- 33 kV ST1	2450456213	2573	2466501111	2573	16044898	0
PML- 33 kV ST2	2093339840	8755	2093339840	8755	0	0
PML- 33 kV ST3	0	0	0	148	0	148
				Total 33 KV export	16044898	148
PML- 132 kV ST1	2620513695	663969	2636367142	663969	15853446	0
PML- 132 kV ST2	2178781732	375613	2180133324	375613	1351592	0
PML- 132 kV ST3	1659075698	1932270	1679346079	1932270	20270381	0
				ST 132 KV total	37475419	0
PML- 6.6 kV C1 (T1C)	17049465	866	17049465	866	0	0
PML- 6.6 kV C2 (T2C)	45860603	93783	47346617	93783	1486014	0
PML- 6.6 kV C5 (T3C)	88305777	186	91120870	186	2815093	0
				Total 6.6 KV station load	4301107	0
PML- 132 kV GT1 (G1A)	6952134464	8387	6989392983	8387	37258519	0
PML- 132 kV GT2 (G2A)	0	46659	0	46659	10997270	0
PML- 132 kV GT3 (G3A)	12325635476	2873	12389161993	2873	63526518	0
PML- 132 kV GT4 (G4A)	8066714743	17972	8135950390	17972	69235647	0
PML- 132 kV ICT1 (G5A)	4557233625	391	4632138023	391	74904399	0
				Total GT export at 132 KV	255922352	0
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2782277	10	2782277	10	0	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49489910	380195	49489910	380195	0	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3407007	73	3415811	73	8804	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9128516	52	9132807	52	4291	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6167915	349	6167915	349	0	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1682341	91	1682341	91	0	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	10502075	35514523	10790889	35514523	288814	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	14012714	15291909	14731356	15291909	718642	0
PML - 6.6 KV C1to C8 (TIE U5) T9	33245053	4012928	33391341	4012928	146288	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	32791076	325	32939516	325	148440	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459179	30	3459626	30	447	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3234678	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	82491622	3	84134793	3	1643171	0
PML - 6.6 KV U1B (Unit I/C U1)	2062726	99	4417119	99	2354393	0
PML - 6.6 KV U2A (Unit I/C U2)	86558131	31	89470334	31	2912203	0
PML - 6.6 KV U2B (Unit I/C U2)	39887331	104	41865996	104	1978665	0
PML - 6.6 KV U3A (Unit I/C U3)	60254255	28	62891402	28	2637147	0
PML - 6.6 KV U3B (Unit I/C U3)	32188567	213	34585445	213	2396878	0
PML - 6.6 KV U4A (Unit I/C U4)	92563767	55	95257669	55	2693902	0
PML - 6.6 KV U4B (Unit I/C U4)	67899790	62	71403829	62	3504039	0
PML - 6.6 KV U5A (Unit I/C U5)	4851094	9	7899441	9	3048	0

PML - 6.6 KV U5B (Unit I/C U5)	8824369	7	2477359	7	3652990	0
C1 - BPRS 6.6 KV Feeder F1	663.10	0	663.10	0	0	0
BPRS - Jemco reveocery F2	1692.83	0	1603.99	0	1160	0
				Total consumption by unit bus from Station	308270	0
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-1160	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1145858		1162773		16915000	
Cummins feeder at Cummins end	6637		8838		2201000	
Lafarge feeder at Lafarge end	62873		77422		14549000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1109788	1128382	22312800	MF 1200000		
Lin # 9 SECURE METER Reading	2566.04	2594.82	28780000	MF 1000000		

Reactive Generation Readings					
	KVARH	MVAR			
Generator # 1 reactive	24997888	34.72	Generator # 4 reactive	41638912	57.83
Generator # 2 reactive	35099648	48.75	Generator # 5 reactive	27208192	37.79
Generator # 3 reactive	35906560	49.87			

Compressor Readings						
	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	13262558	2	13359696	2	97138	0
Air Comp 1B (U1B Bus)	13147247	2	13268896	2	121649	0
Air Comp 2A (U2A Bus)	78921551	20	78921551	20	107524	0
Air Comp 2B (C3 Bus)	17400007	8	17876175	8	476168	0
Air Comp 2C (U3A Bus)	71935433	0	72054479	0	119046	0
Air Comp 4A (U 4A Bus)	16780453	1680	17046911	1680	266458	0
Air Comp 4B (U 4B Bus)	26179307	2	26437505	2	258198	0
Air Comp 5B (U5B Bus)	34048499	3727	34600208	3727	551709	0
				Toatal Comp Load	1997890	

CLPH unit # 1 Readings				
CLPH INC 1	9705.40	9876.70	171301	
CLPH INC 2	7159.04	7251.60	92557	
CT FAN BUS A SIDE	3599.90	3674.30	74399	
CT FAN BUS B SIDE	3632.02	3705.90	73882	
Common Load on CLPH Unit 1 (inc1 - inc 2 - CT fan bus A - CT fan bus B)			115577	

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Jun-19 12:00:00 AM TO: 01-Jul-19 12:00:00 AM

Report Generated on : 01-Jul-19 12:00:00 AM

Total Station Load (C1 + C2+ C5)	4302267	Total station to unit tie load	308270	3993997	< allocated load
Total Compressor load on units	1521722	Total common load on CLPH bus for allocation		115577	

	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	41327396	64911402	68926604	76008975	81857044	333031421
Unit Load	4068878	5280336	5400086	6653995	7221479	28624774
Compressor Load allocation	188837	296600	314947	347308	374030	1521722
CLPH load allocation	14342	22527	23921	26379	28408	115577
Corrected Unit Load	3937693	5491940	5619907	6503026	7072208	28624774
% Unit Consumption	9.53	8.46	8.15	8.56	8.64	8.60%
Allocated Station Load	495633	778473	826627	911564	981700	3993997
Station to unit consumption	0	13095	0	447	294728	308270
Total station load for each unit	495633	791568	826627	912011	1276428	4302267
% station load	1.20%	1.22%	1.20%	1.20%	1.56%	1.29%
Total Aux. consumed by unit	4433327	6283508	6446534	7415037	8348636	32927041
% of Aux. Consumption	10.73%	9.68%	9.35%	9.76%	10.20%	9.89%
Deemed PLF	100.00%	99.51%	100.00%	100.00%	99.81%	
P L F %	85.04%	75.13%	79.78%	87.97%	94.74%	84.48%

Tisco Representative

Name: Mr. C N S Gautam & Mr G K Sinha

Signature

Date & Time 01-Jul-19 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko & Ms. Suchismita Nayak

Signature

Date & Time 1/7/19 01-Jul-19 12:00:00 AM

The Above calculations are made on the basis of mutual understanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 25th OCT 2011. For Unit 1,2 and 3 the unit Aux calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load , for Unit 4 and 5 unit I/C bus recorded by 6.6 KV end meters plus

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C!,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.**Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.**

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT **FROM:** 01-Jul-19 12:00:00 AM **TO:** 01-Aug-19 12:00:00 AM

Report Generated on : 01-Aug-19 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1507750317	0	1549754444	0	42004128	0
PML- GEN # 2 (Check)	3440955012	0	3502849658	0	61894645	0
PML- GEN # 3 (CHECK)	4394599265	132	4461862351	132	67263087	0
PML- GEN # 4 (CHECK)	11140720032	23366	11208859096	23366	68139064	0
PML- GEN # 5	6997189290	188	7073935755	188	76746465	0
				Total Generation (PML)	316047388	
PML- GEN # 1 (G1B)	7945386860	340	7987034891	340	41648031	0
PML- GEN # 2 (G2B)	13249972999	442	13311564340	442	61591341	0
PML- GEN # 3 (G3B)	13534901298	530	13601930631	530	67029334	0
PML GEN # 4 (G4B)	11195689127	375	11264051862	375	68362735	0
PML GEN # 5 (G5B)	6996091123	1507	7072705274	1507	76614151	0
				Total Generation (Alpha)	315245591	
EXPORT						
PML- LINE # 1	8349645408	214369	8394508699	214369	44863291	0
PML- LINE # 2	0	0	0	0	44863291	0
PML- LINE # 3	7678596830	106130	7721751452	106130	43154622	0
PML- LINE # 4	2713812196	25	2754670386	25	40858191	0
PML- LINE # 5	4046897142	9570885	4064730257	9570885	17833115	0
PML- LINE # 6	1449672963	752	1468797890	752	19124927	0
PML- LINE # 7	835763712	127713384	842075008	127713384	6311296	0
PML- LINE # 8	733535424	38821884	740117888	38821884	6582464	0
PML- LINE # 9	2480507089	40	2509654229	40	29147140	0
				Total 132 KV export	252738336	0
PML- 33 kV ST1	2466501111	2573	2480672566	2573	14171455	0
PML- 33 kV ST2	2093339840	8755	2093339840	8755	0	0
PML- 33 kV ST3	0	0	0	148	0	148
				Total 33 KV export	14171455	148
PML- 132 kV ST1	2636367142	663969	2650384186	663969	14017044	0
PML- 132 kV ST2	2180133324	375613	2181047097	375613	913773	0
PML- 132 kV ST3	1679346079	1932270	1697712920	1932270	18366841	0
				ST 132 KV total	33297658	0
PML- 6.6 kV C1 (T1C)	17049465	866	17073170	866	23705	0
PML- 6.6 kV C2 (T2C)	47346617	93783	48402117	93783	1055500	0
PML- 6.6 kV C5 (T3C)	91120870	186	94049064	186	2928194	0
				Total 6.6 KV station load	4007399	0
PML- 132 kV GT1 (G1A)	6989392983	8387	7026874188	8387	37481205	0
PML- 132 kV GT2 (G2A)	0	46659	0	46659	10997270	0
PML- 132 kV GT3 (G3A)	12389161993	2873	12450537309	2873	61375316	0
PML- 132 kV GT4 (G4A)	8135950390	17972	8197822355	17972	61871965	0
PML- 132 kV ICT1 (G5A)	4632138023	391	4701855376	391	69717353	0
				Total GT export at 132 KV	241443108	0
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2782277	10	2782277	10	0	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49489910	380195	49489910	380195	0	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6167915	349	6167915	349	0	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1682341	91	1682341	91	0	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	10790889	35514523	11082746	35514523	291857	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	14731356	15291909	15474693	15291909	743337	0
PML - 6.6 KV C1to C8 (TIE U5) T9	33391341	4012928	33537319	4012928	145978	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	32939516	325	33099459	325	159943	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459626	30	3459626	30	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3234678	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	84134793	3	86058674	3	1923881	0
PML - 6.6 KV U1B (Unit I/C U1)	4417119	99	6557953	99	2140834	0
PML - 6.6 KV U2A (Unit I/C U2)	89470334	31	92248280	31	2777946	0
PML - 6.6 KV U2B (Unit I/C U2)	41865996	104	43774883	104	1908887	0
PML - 6.6 KV U3A (Unit I/C U3)	62891402	28	65878835	28	2987433	0
PML - 6.6 KV U3B (Unit I/C U3)	34585445	213	36857723	213	2272278	0
PML - 6.6 KV U4A (Unit I/C U4)	95257669	55	98526295	55	3268626	0
PML - 6.6 KV U4B (Unit I/C U4)	71403829	62	74118766	62	2714937	0
PML - 6.6 KV U5A (Unit I/C U5)	7928441	9	1117507	9	3189066	0

PML - 6.6 KV U5B (Unit I/C U5)	2477359	7	5775052	7	3297693	0
C1 - BPRS 6.6 KV Feeder F1	653.10	0	653.10	0	0	0
BPRS - Jemco reveocery F2	1603.99	0	1605.16	0	1170	0
				Total consumption by unit bus from Station	305921	0
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-1170	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1162773		1176102		13329000	
Cummins feeder at Cummins end	8838		10726		1888000	
Lafarge feeder at Lafarge end	77422		92153		14731000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1128382	1144264	19058400	MF 1200000		
Lin # 9 SECURE METER Reading	2594.82	2624.99	30170000	MF 1000000		
Reactive Generation Readings						
	KVARH	MVAR				
Generator # 1 reactive	26689536	35.87	Generator # 4 reactive		40300544	54.17
Generator # 2 reactive	32410624	43.56	Generator # 5 reactive		32390144	43.54
Generator # 3 reactive	35486720	47.70				

Compressor Readings						
	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	13359696	2	13380111	2	20415	0
Air Comp 1B (U1B Bus)	13268896	2	13528254	2	259358	0
Air Comp 2A (U2A Bus)	78921551	20	78921551	20	107524	0
Air Comp 2B (C3 Bus)	17876175	8	18145535	8	269360	0
Air Comp 2C (U3A Bus)	72054479	0	72370883	0	316404	0
Air Comp 4A (U 4A Bus)	17046911	1680	17333328	1680	286417	0
Air Comp 4B (U 4B Bus)	26437505	2	26742362	2	304857	0
Air Comp 5B (U5B Bus)	34600208	3727	35111450	3727	511242	0
				Toatal Comp Load	2075577	
CLPH unit # 1 Readings						
CLPH INC 1	9876.70		10040.00		163300	
CLPH INC 2	7251.60		7347.20		95600	
CT FAN BUS A SIDE	3674.30		3750.40		76100	
CT FAN BUS B SIDE	3705.90		3781.40		75500	
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					107300	

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Jul-19 12:00:00 AM TO: 01-Aug-19 12:00:00 AM

Report Generated on : 01-Aug-19 12:00:00 AM

Total Station Load (C1 + C2+ C5)	4008569	Total station to unit tie load	305921	3702648	< allocated load	
Total Compressor load on units	1806217	Total common load on CLPH bus for allocation		107300		
	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	41648031	61591341	67029334	68362735	76614151	315245591
Unit Load	4166826	5056381	5654018	6393739	6946444	28217408
Compressor Load allocation	238625	352891	384048	391688	438965	1806217
CLPH load allocation	14176	20964	22815	23269	26077	107300
Corrected Unit Load	4032553	5322712	5744477	6217422	6900244	28217408
% Unit Consumption	9.68	8.64	8.57	9.09	9.01	8.95%
Allocated Station Load	489168	723408	787278	802940	899855	3702648
Station to unit consumption	0	0	0	0	305921	305921
Total station load for each unit	489168	723408	787278	802940	1205776	4008569
% station load	1.17%	1.17%	1.17%	1.17%	1.57%	1.27%
Total Aux. consumed by unit	4521721	6046119	6531755	7020362	8106019	32225977
% of Aux. Consumption	10.86%	9.82%	9.74%	10.27%	10.58%	10.22%
Deemed PLF	100.00%	100.00%	100.00%	100.00%	99.14%	
P L F %	82.93%	68.99%	75.08%	76.57%	85.81%	77.39%

Tisco Representative

Name: Mr. C N S Gautam & Mr A Arif

Signature

Date & Time 01-Aug-19 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko,Ms Usha Agrawal, Ms. Suchismita Nayak

Signature

Date & Time 01-Aug-19 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load . for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C1,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.**Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.**

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT **FROM:** 01-Aug-19 12:00:00 AM **TO:** 01-Sep-19 12:00:00 AM

Report Generated on : 01-Sep-19 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1549754444	0	1590400376	0	40645932	0
PML- GEN # 2 (Check)	3502849658	0	3563885062	0	60835404	0
PML- GEN # 3 (CHECK)	4461862351	132	4524410238	146	62547886	14
PML- GEN # 4 (CHECK)	11208859096	23366	11278697589	23366	69838493	0
PML- GEN # 5	7073935755	188	7148446722	206	74510968	18
				Total Generation (PML)	308378683	
PML- GEN # 1 (G1B)	7987034891	340	8027338415	340	40303524	0
PML- GEN # 2 (G2B)	13311564340	442	13372065841	469	60501501	27
PML- GEN # 3 (G3B)	13601930631	530	13664223971	544	62293340	14
PML GEN # 4 (G4B)	11264051862	375	11334129170	376	70077309	1
PML GEN # 5 (G5B)	7072705274	1507	7147089344	1525	74384070	18
				Total Generation (Alpha)	307559743	
EXPORT						
PML- LINE # 1	8394508699	214369	8438635222	214369	44126523	0
PML- LINE # 2	0	0	0	0	44126523	0
PML- LINE # 3	7721751452	106130	7764225112	106130	42473660	0
PML- LINE # 4	2754670386	25	2791268711	49814	36598325	49790
PML- LINE # 5	4064730257	9975643	4091737079	10013319	27006822	37676
PML- LINE # 6	1468797890	752	1485970051	752	17172161	0
PML- LINE # 7	842075008	127713384	848734144	127713432	6659136	48
PML- LINE # 8	740117888	38821884	747059200	38821892	6941312	8
PML- LINE # 9	2509654229	40	2533070347	40	23416118	0
				Total 132 KV export	248520580	87522
PML- 33 kV ST1	2480672566	2573	2493165868	2628	12493303	55
PML- 33 kV ST2	2093339840	8755	2093339840	8755	0	0
PML- 33 kV ST3	0	0	0	148	0	148
				Total 33 KV export	12493303	203
PML- 132 kV ST1	2650384186	663969	2664211984	663969	13827798	0
PML- 132 kV ST2	2181047097	375613	2181147762	508217	100665	132604
PML- 132 kV ST3	1697712920	1932270	1713519926	1948427	15807006	16157
				ST 132 KV total	29735469	0
PML- 6.6 kV C1 (T1C)	17073170	866	18614293	866	1541123	0
PML- 6.6 kV C2 (T2C)	48402117	93783	48528177	93783	154642	0
PML- 6.6 kV C5 (T3C)	94049064	186	96553354	186	2504290	0
				Total 6.6 KV station load	4200055	0
PML- 132 kV GT1 (G1A)	7026874188	8387	7063046711	8400	36172523	13
PML- 132 kV GT2 (G2A)	0	46659	0	46659	10997270	0
PML- 132 kV GT3 (G3A)	12450537309	2873	12507278703	2889	56741394	16
PML- 132 kV GT4 (G4A)	8197822355	17972	8261240959	17972	63418605	0
PML- 132 kV ICT1 (G5A)	4701855376	391	4769339436	1031	67484060	640
				Total GT export at 132 KV	234813851	670
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2782277	10	2803341	10	21064	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49489910	380195	49515648	380195	25738	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6167915	349	6167915	349	0	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1682341	91	1682341	91	0	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	11082746	35514523	11290455	35514523	207709	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	15474693	15291909	16252615	15291909	777922	0
PML - 6.6 KV C1to C8 (TIE U5) T9	33537319	4012928	33659674	4012928	122355	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	33099459	325	33274248	325	174789	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459626	30	3459626	30	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3234678	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	86058674	3	88007123	3	1948449	0
PML - 6.6 KV U1B (Unit I/C U1)	6557953	99	8667955	99	2110002	0
PML - 6.6 KV U2A (Unit I/C U2)	92248280	31	94919238	31	2670958	0
PML - 6.6 KV U2B (Unit I/C U2)	43774883	104	45621145	104	1846262	0
PML - 6.6 KV U3A (Unit I/C U3)	65878835	28	68878290	28	2999455	0
PML - 6.6 KV U3B (Unit I/C U3)	36857723	213	39146367	213	2288644	0
PML - 6.6 KV U4A (Unit I/C U4)	98526295	55	101077671	55	2551376	0
PML - 6.6 KV U4B (Unit I/C U4)	74118766	62	77688498	62	3569732	0
PML - 6.6 KV U5A (Unit I/C U5)	1117507	9	3938645	9	2821138	0

PML - 6.6 KV U5B (Unit I/C U5)	5775052	7	9624808	7	3849757	0
C1 - BPRS 6.6 KV Feeder F1	653.10	0	676.20	0	23100	0
BPRS - Jemco reveocery F2	1605.16	0	1606.39	0	1230	0
				Total consumption by unit bus from Station	343946	0
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					21870	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1176102		1187984		11882000	
Cummins feeder at Cummins end	10726		12408		1682000	
Lafarge feeder at Lafarge end	92153		104449		12296000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1144264	1158645	17257200	MF 1200000		
Lin # 9 SECURE METER Reading	2624.99	2648.57	23580000	MF 1000000		
Reactive Generation Readings						
	KVARH	MVAR				
Generator # 1 reactive	24436736	32.85	Generator # 4 reactive		39725568	53.39
Generator # 2 reactive	26547200	35.68	Generator # 5 reactive		33507328	45.04
Generator # 3 reactive	28419584	38.20				
Compressor Readings						
	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	13380111	2	13514580	2	134469	0
Air Comp 1B (U1B Bus)	13528254	2	13725241	2	196987	0
Air Comp 2A (U2A Bus)	1013988	20	1248139	20	234151	0
Air Comp 2B (C3 Bus)	18145535	8	18415411	8	269876	0
Air Comp 2C (U3A Bus)	72370883	0	72848311	0	477428	0
Air Comp 4A (U 4A Bus)	17333328	1680	17355536	1680	22208	0
Air Comp 4B (U 4B Bus)	26742362	2	27286943	2	544581	0
Air Comp 5B (U5B Bus)	35111450	3727	35444604	3727	333154	0
				Toatal Comp Load	2212854	
CLPH unit # 1 Readings						
CLPH INC 1	10040.00		10203.21		163208	
CLPH INC 2	7347.20		7437.04		89842	
CT FAN BUS A SIDE	3750.40		3825.34		74938	
CT FAN BUS B SIDE	3781.40		3855.78		74380	
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					103732	

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Aug-19 12:00:00 AM TO: 01-Sep-19 12:00:00 AM

Report Generated on : 01-Sep-19 12:00:00 AM

Total Station Load (C1 + C2+ C5)	4178185	Total station to unit tie load	343946	3834239	< allocated load	
Total Compressor load on units	1942978	Total common load on CLPH bus for allocation		103732		
	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	40303524	60501501	62293340	70077309	74384070	307559743
Unit Load	4131001	4880229	5523364	6541572	7117199	28193365
Compressor Load allocation	254613	382212	393532	442706	469914	1942978
CLPH load allocation	13593	20406	21010	23635	25088	103732
Corrected Unit Load	3964020	5048696	5460478	6441125	7279047	28193365
% Unit Consumption	9.84	8.34	8.77	9.19	9.79	9.17%
Allocated Station Load	502450	754251	776589	873629	927320	3834239
Station to unit consumption	46802	0	0	0	297144	343946
Total station load for each unit	549252	754251	776589	873629	1224464	4178185
% station load	1.36%	1.25%	1.25%	1.25%	1.65%	1.36%
Total Aux. consumed by unit	4513272	5802947	6237067	7314754	8503511	32371550
% of Aux. Consumption	11.20%	9.59%	10.01%	10.44%	11.43%	10.53%
Deemed PLF	98.25%	100.00%	100.00%	100.00%	97.91%	
P L F %	80.25%	67.77%	69.77%	78.49%	83.32%	75.50%

Tisco Representative

Name: Mr. C N S Gautam & Mr A Arif

Signature

Date & Time 01-Sep-19 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko, Ms. Subhismita Nayak

Signature

Date & Time 01-Sep-19 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load . for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C!,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.**Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.**

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Sep-19 12:00:00 AM TO: 01-Oct-19 12:00:00 AM

Report Generated on : 01-Oct-19 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1590400376	0	1630647424	0	40247048	0
PML- GEN # 2 (Check)	3563685062	0	3622721879	0	59036817	0
PML- GEN # 3 (CHECK)	4524410238	146	4583402570	146	58992333	0
PML- GEN # 4 (CHECK)	11278697589	23366	11348620018	23366	69922429	0
PML- GEN # 5	7148446722	206	7222242932	206	73796210	0
				Total Generation (PML)	301994836	
PML- GEN # 1 (G1B)	8027338415	340	8067265178	340	39926763	0
PML- GEN # 2 (G2B)	13372065841	469	13430631076	469	58565236	0
PML- GEN # 3 (G3B)	13664223971	544	13723004165	544	58780194	0
PML GEN # 4 (G4B)	11334129170	376	11404319848	376	70190678	0
PML GEN # 5 (G5B)	7147089344	1525	7220759486	1525	73670142	0
				Total Generation (Alpha)	301133013	
EXPORT						
PML- LINE # 1	8438635222	214369	8478493380	214369	39858158	0
PML- LINE # 2	0	0	0	0	39606453	0
PML- LINE # 3	7764225112	106130	7802445582	106130	38220470	0
PML- LINE # 4	2791268711	49814	2827177001	49815	35908290	1
PML- LINE # 5	4091737079	10013319	4122866564	10061214	31129485	47895
PML- LINE # 6	1485970051	752	1503341986	752	17371935	0
PML- LINE # 7	848734144	127713432	856452928	127713432	7718784	0
PML- LINE # 8	747059200	38821892	755036096	38821892	7976896	0
PML- LINE # 9	2533070347	40	2557096718	40	24026371	0
				Total 132 KV export	241816841	47895
PML- 33 kV ST1	2493165868	2628	2506357121	2628	13191253	0
PML- 33 kV ST2	2093339840	8755	2093339840	8755	0	0
PML- 33 kV ST3	0	148	0	148	0	0
				Total 33 KV export	13191253	0
PML- 132 kV ST1	2664211984	663969	2678585927	663969	14373944	0
PML- 132 kV ST2	2181147762	508217	2181147762	665307	0	157090
PML- 132 kV ST3	1713519926	1948427	1729548074	1948427	16028148	0
				ST 132 KV total	30402092	0
PML- 6.6 kV C1 (T1C)	18614293	866	20028313	866	1414020	0
PML- 6.6 kV C2 (T2C)	48528177	93783	48528177	93783	28594	0
PML- 6.6 kV C5 (T3C)	96553354	186	98607666	186	2054312	0
				Total 6.6 KV station load	3496926	0
PML- 132 kV GT1 (G1A)	7063046711	8400	7098879381	8400	35832670	0
PML- 132 kV GT2 (G2A)	0	46659	0	46659	10997270	0
PML- 132 kV GT3 (G3A)	12507278703	2889	12560771831	2889	53493128	0
PML- 132 kV GT4 (G4A)	8261240959	17972	8324821456	17972	63580496	0
PML- 132 kV ICT1 (G5A)	4769339436	1031	4836280496	1031	66941060	0
				Total GT export at 132 KV	230844624	0
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2803341	10	2803341	0	0	-10
PML - 6.6 KV C2 to U1B (TIE U1) T2	49515648	380195	49515648	380195	0	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6167915	349	6167915	349	0	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1682341	91	1682341	91	0	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	11290455	35514523	11463327	35514523	172872	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	16252615	15291909	16986950	15291909	734335	0
PML - 6.6 KV C1to C8 (TIE U5) T9	33659674	4012928	33760283	4012932	100609	4
PML - 6.6 KV C5 to C9 (TIE U5) T10	33274248	325	33417142	325	142894	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459626	30	3459626	30	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3234678	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	88007123	3	89853470	3	1846347	0
PML - 6.6 KV U1B (Unit I/C U1)	8667955	99	10836524	99	2168569	0
PML - 6.6 KV U2A (Unit I/C U2)	94919238	31	97759316	31	2840078	0
PML - 6.6 KV U2B (Unit I/C U2)	45621145	104	47463483	104	1842338	0
PML - 6.6 KV U3A (Unit I/C U3)	68878290	28	71601516	28	2723226	0
PML - 6.6 KV U3B (Unit I/C U3)	9146367	213	11491152	213	2344785	0
PML - 6.6 KV U4A (Unit I/C U4)	101077671	55	103723263	55	2645592	0
PML - 6.6 KV U4B (Unit I/C U4)	77688498	62	81112377	62	3423879	0
PML - 6.6 KV U5A (Unit I/C U5)	3938645	9	6872512	0	2933867	-9

PML - 6.6 KV U5B (Unit I/C U5)	9624808	7	3060775	0	3435967	-7
C1 - BPRS 6.6 KV Feeder F1	676.20	0	676.20	0	0	0
BPRS - Jemco reveocery F2	1606.39	0	1633.14	0	26750	0
				Total consumption by unit bus from Station	243503	-6
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-26750	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1187984		1199817		11833000	
Cummins feeder at Cummins end	12408		14056		1648000	
Lafarge feeder at Lafarge end	104449		118427		13978000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1158645	1173061	17299200	MF 1200000		
Lin # 9 SECURE METER Reading	2648.57	2672.78	24210000	MF 1000000		

Reactive Generation Readings

	KVARH	MVAR			
Generator # 1 reactive	25291264	35.13	Generator # 4 reactive	38688256	53.73
Generator # 2 reactive	19393536	26.94	Generator # 5 reactive	34369536	47.74
Generator # 3 reactive	24874496	34.55			

Compressor Readings

	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	13514580	2	13647391	2	132811	0
Air Comp 1B (U1B Bus)	13725241	2	13853290	2	128049	0
Air Comp 2A (U2A Bus)	1248139	20	1541280	20	293141	0
Air Comp 2B (C3 Bus)	18415411	8	18545265	8	129854	0
Air Comp 2C (U3A Bus)	72848311	0	73361565	0	513254	0
Air Comp 4A (U 4A Bus)	17355536	1680	17829579	1680	474043	0
Air Comp 4B (U 4B Bus)	27286943	2	27353573	2	66630	0
Air Comp 5B (U5B Bus)	35444604	3727	35444604	3727	0	0
				Toatal Comp Load	1737782	

CLPH unit # 1 Readings

CLPH INC 1	10203.21		10349.40		146192	
CLPH INC 2	7437.04		7519.20		82158	
CT FAN BUS A SIDE	3825.34		3894.00		68662	
CT FAN BUS B SIDE	3855.78		3924.00		68220	
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					91468	

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Sep-19 12:00:00 AM TO: 01-Oct-19 12:00:00 AM

Report Generated on : 01-Oct-19 12:00:00 AM

Total Station Load (C1 + C2+ C5)	3523676	Total station to unit tie load	243503	3280173	< allocated load
Total Compressor load on units	1607928	Total common load on CLPH bus for allocation	91468		

	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	39926763	58565236	58780194	70190678	73670142	301133013
Unit Load	4094093	5033807	5258472	6490615	6811855	27688842
Compressor Load allocation	213193	312715	313862	374790	393369	1607928
CLPH load allocation	12128	17789	17854	21320	22377	91468
Corrected Unit Load	3967085	5071170	5076935	6346052	7227601	27688842
% Unit Consumption	9.94	8.66	8.64	9.04	9.81	9.19%
Allocated Station Load	434913	637938	640279	764571	802472	3280173
Station to unit consumption	0	0	0	0	243503	243503
Total station load for each unit	434913	637938	640279	764571	1045975	3523676
% station load	1.09%	1.09%	1.09%	1.09%	1.42%	1.17%
Total Aux. consumed by unit	4401998	5709108	5717214	7110623	8273576	31212518
% of Aux. Consumption	11.03%	9.75%	9.73%	10.13%	11.23%	10.37%
Deemed PLF	100.00%	100.00%	100.00%	100.00%	100.00%	
P L F %	82.15%	67.78%	68.03%	81.24%	85.27%	76.39%

Tisco Representative

Name: Mr. C N S Gautam & Mr A Arif

Signature

Date & Time 01-Oct-19 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko, Ms. Suchismita Nayak

Signature

Date & Time 01-Oct-19 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load . for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C1,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT **FROM:** 01-Oct-19 12:00:00 AM **TO:** 01-Nov-19 12:00:00 AM

Report Generated on : 01-Nov-19 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1630647424	0	1673192327	0	42544903	0
PML- GEN # 2 (Check)	3622721879	0	3684248594	0	61526715	0
PML- GEN # 3 (CHECK)	4583402570	146	4642608195	146	59205625	0
PML- GEN # 4 (CHECK)	11348620018	23366	11424486921	23366	75866903	0
PML- GEN # 5	7222242932	206	7291858263	206	69615331	0
				Total Generation (PML)	308759476	
PML- GEN # 1 (G1B)	8067265178	340	8109389045	340	42123867	0
PML- GEN # 2 (G2B)	13430631076	469	13492038887	469	61407810	0
PML- GEN # 3 (G3B)	13723004165	544	13781994258	544	58990093	0
PML GEN # 4 (G4B)	11404319848	376	11480473009	376	76153161	0
PML GEN # 5 (G5B)	7220759486	1525	7290256875	1525	69497389	0
				Total Generation (Alpha)	308172321	
EXPORT						
PML- LINE # 1	8478493380	214369	8520836834	214369	42343454	0
PML- LINE # 2	0	0	0	0	42915157	0
PML- LINE # 3	7802445582	106130	7843785257	106130	41339676	0
PML- LINE # 4	2827177001	49815	2866567636	49815	39390635	0
PML- LINE # 5	4122866564	10061214	4151813277	10124347	28946713	63133
PML- LINE # 6	1503341986	752	1518705326	766	15363341	13
PML- LINE # 7	856452928	127713432	866019904	127713512	9566976	80
PML- LINE # 8	755036096	38821892	764849920	38821892	9813824	0
PML- LINE # 9	2557096718	40	2580371233	40	23274515	0
				Total 132 KV export	252954291	63226
PML- 33 kV ST1	2506357121	2628	2517124930	2628	10767810	0
PML- 33 kV ST2	2093339840	8755	2093910016	8755	570176	0
PML- 33 kV ST3	0	148	0	148	0	0
				Total 33 KV export	11337986	0
PML- 132 kV ST1	2678585927	663969	2690580211	663969	11994284	0
PML- 132 kV ST2	2181147762	665307	2181794564	813185	646802	147878
PML- 132 kV ST3	1729548074	1948427	1742266002	1948436	12717928	9
				ST 132 KV total	25359013	147887
PML- 6.6 kV C1 (T1C)	20028313	866	21457205	866	1428892	0
PML- 6.6 kV C2 (T2C)	48528177	93783	48614770	93787	115187	4
PML- 6.6 kV C5 (T3C)	98607666	186	571862	186	1964196	0
				Total 6.6 KV station load	3508275	4
PML- 132 kV GT1 (G1A)	7098879381	8400	7136756153	8405	37876772	5
PML- 132 kV GT2 (G2A)	0	46659	0	46659		0
PML- 132 kV GT3 (G3A)	12560771831	2889	12614670304	2889	53898473	0
PML- 132 kV GT4 (G4A)	8324821456	17972	8393672159	17972	68850704	0
PML- 132 kV ICT1 (G5A)	4836280496	1031	4899307885	1052	63027390	21
				Total GT export at 132 KV	223653338	25
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2803341	0	2828052	0	24711	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49515648	380195	49536827	380195	21179	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6167915	349	6167915	349	0	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1682341	91	1682341	91	0	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	11463327	35514523	11710411	35514523	247084	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	16986950	15291909	17507212	15291909	520262	0
PML - 6.6 KV C1to C8 (TIE U5) T9	33760283	4012932	33886555	4012932	126272	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	33417142	325	33417392	383	250	58
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459626	30	3459626	30	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3234678	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	89853470	3	92150906	3	2297436	0
PML - 6.6 KV U1B (Unit I/C U1)	10836524	99	12701653	99	1865129	0
PML - 6.6 KV U2A (Unit I/C U2)	97759316	31	720659	31	2961343	0
PML - 6.6 KV U2B (Unit I/C U2)	47463483	104	49478951	104	2015468	0
PML - 6.6 KV U3A (Unit I/C U3)	71601516	28	74235388	28	2633872	0
PML - 6.6 KV U3B (Unit I/C U3)	11491152	213	13926393	213	2435241	0
PML - 6.6 KV U4A (Unit I/C U4)	3723263	55	7520693	55	3797430	0
PML - 6.6 KV U4B (Unit I/C U4)	81112377	62	84032193	62	2919816	0
PML - 6.6 KV U5A (Unit I/C U5)	6872512	0	9742041	0	2869529	0

PML - 6.6 KV U5B (Unit I/C U5)	3060775	0	5266085	0	2205310	0
C1 - BPRS 6.6 KV Feeder F1	676.20	0	676.20	0	0	0
BPRS - Jemco reveocery F2	1633.14	0	1634.35	0	1210	0
				Total consumption by unit bus from Station	172412	58
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-1210	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1199817		1208397		8580000	
Cummins feeder at Cummins end	14056		15390		1334000	
Lafarge feeder at Lafarge end	118427		130647		12220000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1173061	1185914	15423600	MF 1200000		
Lin # 9 SECURE METER Reading	2672.78	2696.22	23440000	MF 1000000		

Reactive Generation Readings					
	KVARH	MVAR			
Generator # 1 reactive	25046016	33.66	Generator # 4 reactive	41314304	55.53
Generator # 2 reactive	21929472	29.48	Generator # 5 reactive	36470784	49.02
Generator # 3 reactive	22092800	29.69			

Compressor Readings						
	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	13647391	2	13939131	2	291740	0
Air Comp 1B (U1B Bus)	13853290	2	13915702	2	62412	0
Air Comp 2A (U2A Bus)	1541280	20	1924571	20	383291	0
Air Comp 2B (C3 Bus)	18545265	8	18738049	8	192784	0
Air Comp 2C (U3A Bus)	73361565	0	73801851	0	440286	0
Air Comp 4A (U 4A Bus)	17829579	1680	18252285	1680	422706	0
Air Comp 4B (U 4B Bus)	27353573	2	27807258	2	453685	0
Air Comp 5B (U5B Bus)	36564825	3727	36759499	3727	194674	0
				Toatal Comp Load	2441578	

CLPH unit # 1 Readings					
CLPH INC 1	10349.40		10496.00		146600
CLPH INC 2	7519.20		7651.00		131800
CT FAN BUS A SIDE	3894.00		3977.00		83000
CT FAN BUS B SIDE	3924.00		4007.00		83000
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					112400

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Oct-19 12:00:00 AM TO: 01-Nov-19 12:00:00 AM

Report Generated on : 01-Nov-19 12:00:00 AM

Total Station Load (C1 + C2+ C5)	3509485	Total station to unit tie load	172412	3337073	< allocated load
Total Compressor load on units	2248794	Total common load on CLPH bus for allocation		112400	

	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	42123867	61407810	58990093	76153161	69497389	308172321
Unit Load	4247095	5345258	5091620	7174165	6470000	28328138
Compressor Load allocation	307386	448105	430462	555705	507136	2248794
CLPH load allocation	15364	22397	21516	27775	25348	112400
Corrected Unit Load	4103293	5432469	5103312	6881254	6807810	28328138
% Unit Consumption	9.74	8.85	8.65	9.04	9.80	9.19%
Allocated Station Load	456142	664960	638780	824632	752559	3337073
Station to unit consumption	45890	0	0	0	126522	172412
Total station load for each unit	502032	664960	638780	824632	879081	3509485
% station load	1.19%	1.08%	1.08%	1.08%	1.26%	1.14%
Total Aux. consumed by unit	4605325	6097429	5742092	7705886	7686891	31837623
% of Aux. Consumption	10.93%	9.93%	9.73%	10.12%	11.06%	10.33%
Deemed PLF	98.42%	100.00%	100.00%	100.00%	93.52%	
P L F %	83.88%	68.78%	66.07%	85.30%	77.84%	75.65%

Tisco Representative

Name: Mr. C N S Gautam & Mr Gaurav

Signature

Date & Time 01-Nov-19 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko, Ms. Suchismita Nayak

Signature

Date & Time 01-Nov-19 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load . for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C1,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.**Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.**

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Nov-19 12:00:00 AM TO: 01-Dec-19 12:00:00 AM

Report Generated on : 01-Dec-19 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1673192327	0	1716370048	0	43177721	0
PML- GEN # 2 (Check)	3684248594	0	3747468141	0	63219547	0
PML- GEN # 3 (CHECK)	4642608195	146	4708268116	146	65659922	0
PML- GEN # 4 (CHECK)	11424486921	23366	11506385932	23366	81899011	0
PML- GEN # 5	7291858263	206	7315771650	206	23913388	0
				Total Generation (PML)	277869588	
PML- GEN # 1 (G1B)	8109389045	340	8152612602	340	43223557	0
PML- GEN # 2 (G2B)	13492038887	469	13555080025	469	63041138	0
PML- GEN # 3 (G3B)	13781994258	544	13847404341	544	65410083	0
PML GEN # 4 (G4B)	11480473009	376	11562660844	376	82187834	0
PML GEN # 5 (G5B)	7290256875	1525	7314128380	1525	23871505	0
				Total Generation (Alpha)	277734117	
EXPORT						
PML- LINE # 1	8520836834	214369	8559245460	214369	38408626	0
PML- LINE # 2	0	0	0	0	0	0
PML- LINE # 3	7843785257	106130	7880112492	106130	36327235	0
PML- LINE # 4	2866567636	49815	2895891690	49815	29324054	0
PML- LINE # 5	4151813277	10124347	4193179239	10124347	41365962	0
PML- LINE # 6	1518705326	766	1532644467	766	13939141	0
PML- LINE # 7	866019904	127713512	873699456	127713512	7679552	0
PML- LINE # 8	764849920	38821892	772654464	38821892	7804544	0
PML- LINE # 9	2580371233	40	2604784063	40	24412830	0
				Total 132 KV export	199261943	0
PML- 33 kV ST1	2517124930	2628	2530628413	2628	13503483	0
PML- 33 kV ST2	2093910016	8755	2093910016	8755	0	0
PML- 33 kV ST3	0	148	0	148	0	0
				Total 33 KV export	13503483	0
PML- 132 kV ST1	2690580211	663969	2705280167	663969	14699956	0
PML- 132 kV ST2	2181794564	813185	2181794564	947657	0	134471
PML- 132 kV ST3	1742266002	1948436	1758449753	1948436	16183751	0
				ST 132 KV total	30883707	134471
PML- 6.6 kV C1 (T1C)	21457205	866	22817516	866	1360311	0
PML- 6.6 kV C2 (T2C)	48614770	93787	48614770	93787	0	0
PML- 6.6 kV C5 (T3C)	571862	186	2498200	186	1926338	0
				Total 6.6 KV station load	3286649	0
PML- 132 kV GT1 (G1A)	7136756153	8405	7175876170	8410	39120017	5
PML- 132 kV GT2 (G2A)	0	46659	0	46659		0
PML- 132 kV GT3 (G3A)	12614670304	2889	12674810171	2889	60139867	0
PML- 132 kV GT4 (G4A)	8393672159	17972	8468642466	17972	74970307	0
PML- 132 kV ICT1 (G5A)	4899307885	1052	4921167580	1100	21859695	48
				Total GT export at 132 KV	196089886	53
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2828052	0	2859873	0	31821	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49536827	380195	49548546	380195	11719	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6167915	349	6167915	349	0	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1682341	91	1682341	91	0	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	11710411	35514523	11872656	35514523	162245	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	17507212	15291909	18157014	15291909	649802	0
PML - 6.6 KV C1to C8 (TIE U5) T9	33886555	4012932	34078780	4012932	192225	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	33417392	383	33417461	534	69	151
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459626	30	3459626	30	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3234678	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	92150906	3	94228735	3	2077829	0
PML - 6.6 KV U1B (Unit I/C U1)	12701653	99	14553051	99	1851398	0
PML - 6.6 KV U2A (Unit I/C U2)	720659	31	3561751	31	2841092	0
PML - 6.6 KV U2B (Unit I/C U2)	49478951	104	51317206	104	1838255	0
PML - 6.6 KV U3A (Unit I/C U3)	74235388	28	76644148	28	2408760	0
PML - 6.6 KV U3B (Unit I/C U3)	13926393	213	16395389	28	2468996	-185
PML - 6.6 KV U4A (Unit I/C U4)	7520693	55	11092476	55	3571783	0
PML - 6.6 KV U4B (Unit I/C U4)	84032193	62	87065406	62	3033213	0
PML - 6.6 KV U5A (Unit I/C U5)	9742041	0	547676	0	805635	0

PML - 6.6 KV U5B (Unit I/C U5)	5266085	0	6440406	0	1174321	0
C1 - BPRS 6.6 KV Feeder F1	676.20	0	676.20	0	0	0
BPRS - Jemco reveocery F2	1634.35	0	1635.48	0	1130	0
Total consumption by unit bus from Station					235834	151
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-1130	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1208397		1219174		10777000	
Cummins feeder at Cummins end	15390		16811		1421000	
Lafarge feeder at Lafarge end	130647		146376		15729000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1185914	1197515	13921200	MF 1200000		
Lin # 9 SECURE METER Reading	2696.22	2719.96	23740000	MF 1000000		

Reactive Generation Readings					
	KVARH	MVAR			
Generator # 1 reactive	23351296	32.43	Generator # 4 reactive	40418304	56.14
Generator # 2 reactive	21207040	29.45	Generator # 5 reactive	10300928	14.31
Generator # 3 reactive	24843776	34.51			

Compressor Readings						
	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	13939131	2	14093369	2	154238	0
Air Comp 1B (U1B Bus)	13915702	2	14074907	2	159205	0
Air Comp 2A (U2A Bus)	1924571	20	2328881	20	404310	0
Air Comp 2B (C3 Bus)	18738049	8	18974715	8	236666	0
Air Comp 2C (U3A Bus)	73801851	0	74114799	0	312948	0
Air Comp 4A (U 4A Bus)	18252285	1680	18565681	1680	313396	0
Air Comp 4B (U 4B Bus)	27807258	2	28165853	2	358595	0
Air Comp 5B (U5B Bus)	36759499	3727	36915150	3727	155651	0
Toatal Comp Load					2095009	

CLPH unit # 1 Readings					
CLPH INC 1	10496.00		10623.00		127000	
CLPH INC 2	7651.00		7746.30		95300	
CT FAN BUS A SIDE	3977.00		4071.80		94800	
CT FAN BUS B SIDE	4007.00		4048.00		41000	
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					86500	

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TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Nov-19 12:00:00 AM TO: 01-Dec-19 12:00:00 AM

Report Generated on : 01-Dec-19 12:00:00 AM

Total Station Load (C1 + C2+ C5)	3287779	Total station to unit tie load	235834	2962800	< allocated load
Total Compressor load on units	1858343	Total common load on CLPH bus for allocation		86500	

	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	43223557	63041138	65410083	82187834	23871505	277734117
Unit Load	4103540	5134357	5282597	7098123	2011810	23630426
Compressor Load allocation	289213	421814	437665	549926	159726	1858343
CLPH load allocation	13462	19634	20372	25597	7435	86500
Corrected Unit Load	4006271	5171495	5427686	7001655	2023320	23630426
% Unit Consumption	9.27	8.20	8.30	8.52	8.48	8.51%
Allocated Station Load	461098	672508	697779	876760	254655	2962800
Station to unit consumption	43540	0	0	0	192294	235834
Total station load for each unit	504638	672508	697779	876760	446949	3198634
% station load	1.17%	1.07%	1.07%	1.07%	1.87%	1.15%
Total Aux. consumed by unit	4510909	5844002	6125464	7878415	2470269	26829060
% of Aux. Consumption	10.44%	9.27%	9.36%	9.59%	10.35%	9.66%
Deemed PLF	100.00%	100.00%	100.00%	100.00%	29.44%	
P L F %	88.94%	72.96%	75.71%	95.12%	27.63%	70.46%

Tisco Representative

Name: Mr. C N S Gautam & Mr Gaurav S. Vaniba

Signature

Date & Time 01-Dec-19 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko, Ms. Biswajirt Mohanty

Signature Biswajit Mohanty

Date & Time 01-Dec-19 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus 0.6

Head (Accounts)

Through : Chief (O&M)

18/12/2019
18/12/2019
Dt - 18-01-2020

Generation Details for the Month of December'19

1. GENERATION (MWH)	UNIT	ACTUAL	PLAN
1a. Generation from Unit#1 (67.5 MW)	MWH	40272.85	37260.00
1b. Generation from Unit#2 - Regulated Capacity (120 MW)	MWH	58532.12	70464.00
1c. Generation from Unit#3 - Regulated Capacity (120 MW)	MWH	56603.67	70656.00
1d. Generation from Unit#4 (120 MW)	MWH	84104.43	72422.40
1e. Total Generation from Station (427.5 MW)	**MWH**	**239513.06**	**250802.40**
2. RUNNING HOURS (HRS)		**ACTUAL**	**PLAN**
2a. Running hours of Unit#1 (67.5 MW)	HOURS	744.0	736.0
2b. Running hours of Unit#2 (120 MW)	HOURS	744.0	734.0
2c. Running hours of Unit#3 (120 MW)	HOURS	744.0	736.0
2d. Running hours of Unit#4 (120 MW)	HOURS	744.0	736.0
3. GENERATION AVAILABILITY (%)		*** Average Declared Capacity (MW)**	**eneration Availability (%**
3a. Generation Availability of Unit#2 (%)		108.00	100.00%
3b. Generation Availability of Unit#3 (%)		108.00	100.00%
(Availability figures are for full month of 31 days)			
4. EXPORT METER READINGS (MWH)			
4a. Power Export through 132 KV Feeders	MWH	265521	
4b. Power Export through 33 KV Feeders	MWH	14838	
4c. Total Export	**MWH**	**280358.98**	
(Export meter readings are as per PML Meters)			
5. IMPORT METER READINGS (MWH)			
5a. Power Import	MWH	3	
6. AUX POWER CONSUMPTION & TRANSFORMAR LOSSES (MWH)			
6a. Unit#1 Aux Power Consumption	MWH	4181.1	
6b. Unit#2 Aux Power Consumption	MWH	5107.9	
6c. Unit#3 Aux Power Consumption	MWH	5407.1	
6d. Unit#4 Aux Power Consumption	MWH	7825.6	
6e. Total Aux Power Consumption	MWH	**22521.72**	**% 9.40**
(System Losses are included in units auxiliary power consumption)			
7. Ex-Bus Generation (MWH)			
7a. Ex-Bus Generation from Unit#2 - Regulated Capacity (120 MW)*	MWH	53424.21	
7b. Ex-Bus Generation from Unit#3 - Regulated Capacity(120 MW)*	MWH	51196.62	

8.a COAL RECEIPT, CONSUMPTION & STOCK (MT)

Item	Unit	Opening Stock *	Receipt	Consumption					Closing Stock
				Unit#1	Unit#2	Unit#3	Unit #4	Total	
Middling Coal (By Rake)	MT	22084.51	46797.46	18290.18	4052.23	0.00	15433.91	37776.32	31105.65
2 Prod(By Rake)	MT	7063.55	14007.32	0.00	1578.02	2506.01	0.00	4084.03	16986.84
Vinayak/GCL/Sandoz	MT	15256.04	29622.92	2382.66	6055.10	8597.23	13412.30	30447.29	14431.67
BCCL W IV+3 BCCL		24221.54	48608.23	0.00	7085.58	10897.64	0.00	17983.22	54846.55
CCL	MT	0.00	20317.45	0.00	0.00	0.00	0.00	0.00	20317.45
ECL Shakti	MT	0.00	6437.02	0.00	0.00	0.00	0.00	0.00	6437.02
ECL(1&4)	MT	960.18	3746.05	0.00	0.00	0.00	4085.46	4085.46	620.77
ECL(2&3)		8335.43	29482.10	0.00	11520.24	7330.87	0.00	18851.11	18966.42
NCL	MT	0.00	7884.97	1351.82	0.00	0.00	2613.00	3964.82	3920.15
WB REJECT	MT	23429.53	22632.71	3162.45	0.00	0.00	8254.72	11417.17	34645.07
Tailing	MT	39439.91	31793.55	3303.16	1611.24	2547.65	8346.37	15808.42	55425.04
Total Coal	MT	140790.69	261329.78	28490.27	31902.41	31879.40	52145.76	144417.84	257702.63

8.b LDO RECEIPT, CONSUMPTION & STOCK (KL)

Item	Unit	Opening Stock	Receipt	Consumption					Closing Stock
				Unit#1	Unit#2	Unit#3	Unit #4	Total	
LDO	KL	946.25	0.00	42.00	7.00	0.88	1.50	51.38	894.87

9. RAW WATER CONSUMPTION (M^3)		
9a. Unit#1 Raw Water Consumption	M^3	87182
9b. Unit#2 Raw Water Consumption	M^3	126710
9c. Unit#3 Raw Water Consumption	M^3	122535
9d. Unit#4 Raw Water Consumption	M^3	182068
9f. Total Raw Water Consumption	**M^3**	**518495**

10. FLY ASH UTILISATION (MT) including IEL unit 5

Nuvoco	MT	34500	Bricks	MT	0	Wet Disposal	MT	0
Dalmia Cement	MT	9215	RMC	MT	6325	FA Generated	MT	61849
Ash Bagging	MT	11809	DFA Utilized	MT	61849	Fly Ash Utilized	MT	61849
Pond Ash Generated	MT	15462	Pond Ash Utili	MT	47054	**Fly Ash Utilization**	%	100

		Pond 1	Pond 2	
Total capacity	MT	500364	373059	
Total ash in pond in last month	MT	371427	290627	
Total Ash Sent to Jemco Pond	MT	15462	0	
Cleaned during this month (dry & slag free)	MT	0	47054	
Cleaned during this month (With wet & moisture)	MT	0	64048	
Ash Shifting to ISWP Site (With wet & moisture)	MT	0	1305	
Total ash in pond after cleaning	MT	386889	243573	
% of ash in pond	%	77%	65%	Considering full load & total ash sent to pond at the rate of 3470 MT/Day.

Note: **Declared capacity for units 2 & 3 are provisional and is liable to change based on Tata Steel's confirmation**
Ex- Bus Generation of Regulated capacity of Units 2 & 3 has been considered with Actual Aux Power.
Coal Opening Stock includes the Third Party Stock.
LDO Opening Stock indicates Tata Power Stock only.
Fly Ash Utilization data is inclusive of Unit 5.

Vijayant Ranjan
(CEO - IEL & Chief -Jamshedpur Operations)

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Dec-19 12:00:00 AM TO: 01-Jan-20 12:00:00 AM

Report Generated on : 01-Jan-20 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1716370048	0	1757287893	0	40917845	0
PML- GEN # 2 (Check)	3747468141	0	3806250711	0	58782570	0
PML- GEN # 3 (CHECK)	4708268116	146	4765098119	146	56830003	0
PML- GEN # 4 (CHECK)	11506385932	23366	11590188481	23366	83802549	0
PML- GEN # 5	7315771650	206	7404727894	206	88956244	0
				Total Generation (PML)	329289210	
PML- GEN # 1 (G1B)	8152612602	340	8192885448	340	40272847	0
PML- GEN # 2 (G2B)	13555080025	469	13613612142	469	58532117	0
PML- GEN # 3 (G3B)	13847404341	544	13904008008	544	56603667	0
PML GEN # 4 (G4B)	11562660844	376	11646765273	376	84104430	0
PML GEN # 5 (G5B)	7314128380	1525	7402923862	1525	88795482	0
				Total Generation (Alpha)	328308542	
EXPORT						
PML- LINE # 1	8559245460	214369	8601830368	214369	42584908	0
PML- LINE # 2	0	0	0	0	42584908	0
PML- LINE # 3	7880112492	106130	7920967888	106130	40855396	0
PML- LINE # 4	2895891690	49815	2936865093	49815	40973404	0
PML- LINE # 5	4193179239	10124347	4237624804	10127273	44445565	2926
PML- LINE # 6	1532644467	766	1547985727	766	15341261	0
PML- LINE # 7	873699456	127713512	879556672	127713512	5857216	0
PML- LINE # 8	772654464	38821892	778764992	38821892	6110528	0
PML- LINE # 9	2604784063	40	2631551627	40	26767564	0
				Total 132 KV export	265520748	2926
PML- 33 kV ST1	2530628413	2628	2545466640	2628	14838227	0
PML- 33 kV ST2	2093910016	8755	2093910016	8755	0	0
PML- 33 kV ST3	0	148	0	148	0	0
				Total 33 KV export	14838227	0
PML- 132 kV ST1	2705280167	663969	2721379747	663969	16099581	0
PML- 132 kV ST2	2181794564	947657	2181794564	1093850	0	146193
PML- 132 kV ST3	1758449753	1948436	1775778518	1948436	17328765	0
				ST 132 KV total	33428346	146193
PML- 6.6 kV C1 (T1C)	22817516	866	24295993	866	1478477	0
PML- 6.6 kV C2 (T2C)	48614770	93787	48614770	93787	0	0
PML- 6.6 kV C5 (T3C)	2498200	186	4197078	186	1698878	0
				Total 6.6 KV station load	3177355	0
PML- 132 kV GT1 (G1A)	7175876170	8410	7212263087	8410	36386917	0
PML- 132 kV GT2 (G2A)	0	46659	0	46659		0
PML- 132 kV GT3 (G3A)	12674810171	2889	12726665208	2889	51855037	0
PML- 132 kV GT4 (G4A)	8468642466	17972	8545525507	17972	76883041	0
PML- 132 kV ICT1 (G5A)	4921167580	1100	5002689734	1100	81522154	0
				Total GT export at 132 KV	246647149	0
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2859873	0	2965965	0	106092	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49548546	380195	49581368	380195	32822	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	6167915	349	6167915	349	0	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	1682341	91	1682341	91	0	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	11872656	35514523	11942212	35514523	69556	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	18157014	15291909	18875950	15291909	718936	0
PML - 6.6 KV C1to C8 (TIE U5) T9	34078780	4012932	34263644	4012932	184864	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	33417461	534	33417561	534	100	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459626	30	3459626	30	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3234678	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	94228735	3	95998444	3	1769709	0
PML - 6.6 KV U1B (Unit I/C U1)	14553051	99	16532105	99	1979054	0
PML - 6.6 KV U2A (Unit I/C U2)	3561751	31	6260993	31	2699242	0
PML - 6.6 KV U2B (Unit I/C U2)	51317206	104	52903093	104	1585887	0
PML - 6.6 KV U3A (Unit I/C U3)	76644148	28	78697485	28	2053337	0
PML - 6.6 KV U3B (Unit I/C U3)	16395389	28	18738064	28	2342675	0
PML - 6.6 KV U4A (Unit I/C U4)	11092476	55	13499569	55	2407093	0
PML - 6.6 KV U4B (Unit I/C U4)	87065406	62	91229114	62	4163708	0
PML - 6.6 KV U5A (Unit I/C U5)	547676	0	3743201	0	3195525	0

PML - 6.6 KV U5B (Unit I/C U5)	6440406	0	121752	0	3681346	0
C1 - BPRS 6.6 KV Feeder F1	676.20	0	676.20	0	0	0
BPRS - Jemco reveocery F2	1635.48	0	1636.68	0	1200	0
				Total consumption by unit bus from Station	323878	0
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-1200	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1219174		1231498		12324000	
Cummins feeder at Cummins end	16811		18147		1336000	
Lafarge feeder at Lafarge end	146376		163358		16982000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1197515	1210328	15375600	MF 1200000		
Lin # 9 SECURE METER Reading	2719.96	2747.73	27770000	MF 1000000		
Reactive Generation Readings						
	KVARH	MVAR				
Generator # 1 reactive	22314496	29.99	Generator # 4 reactive		41030656	55.15
Generator # 2 reactive	22052864	29.64	Generator # 5 reactive		38924288	52.32
Generator # 3 reactive	24160768	32.47				

Compressor Readings						
	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	14093369	2	14283529	2	190160	0
Air Comp 1B (U1B Bus)	14074907	2	14263919	2	189012	0
Air Comp 2A (U2A Bus)	2328881	20	2764136	20	435255	0
Air Comp 2B (C3 Bus)	18974715	8	19202940	8	228225	0
Air Comp 2C (U3A Bus)	74114799	0	74333344	0	218545	0
Air Comp 4A (U 4A Bus)	18565681	1680	18721920	1680	156239	0
Air Comp 4B (U 4B Bus)	28165853	2	28562445	2	396592	0
Air Comp 5B (U5B Bus)	36915150	3727	37472686	3727	557536	0
				Toatal Comp Load	2371564	
CLPH unit # 1 Readings						
CLPH INC 1	10623.00		10738.00		115000	
CLPH INC 2	7746.30		7845.00		98700	
CT FAN BUS A SIDE	4071.80		4116.00		44200	
CT FAN BUS B SIDE	4048.00		4129.00		81000	
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					88500	

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Dec-19 12:00:00 AM TO: 01-Jan-20 12:00:00 AM

Report Generated on : 01-Jan-20 12:00:00 AM

Total Station Load (C1 + C2+ C5)	3178555	Total station to unit tie load		323878	2854677	< allocated load
Total Compressor load on units	2143339	Total common load on CLPH bus for allocation			88500	
	Unit # 1	**Unit # 2**	**Unit # 3**	**Unit # 4**	**Unit # 5**	**Station**
Generation	40272847	58532117	56603667	84104430	88795482	328308542
Unit Load	3885929	4636322	4748630	7075428	7273328	27619636
Compressor Load allocation	262918	382123	369533	549070	579695	2143339
CLPH load allocation	10856	15778	15258	22671	23936	88500
Corrected Unit Load	3692032	4598968	4914876	7094338	7319423	27619536
% Unit Consumption	9.17	7.86	8.68	8.44	8.24	8.41%
Allocated Station Load	350177	508943	492175	731297	772086	2854677
Station to unit consumption	138914	0	0	0	184964	323878
Total station load for each unit	489091	508943	492175	731297	957050	3178555
% station load	1.21%	0.87%	0.87%	0.87%	1.08%	0.97%
Total Aux. consumed by unit	4181122	5107910	5407051	7825635	8276472	30798191
% of Aux. Consumption	10.38%	8.73%	9.55%	9.30%	9.32%	9.38%
Deemed PLF	100.00%	100.00%	100.00%	100.00%	100.00%	
P L F %	80.19%	65.56%	63.40%	94.20%	99.46%	80.60%

Tisco Representative

Name: Mr. C N S Gautam & Mr Gaurav N K Sahoo

Signature

Date & Time 01-Jan-20 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko, Ms. Suchismita Nayak

Signature

Date & Time 01-Jan-20 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load . for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C1,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.**Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.**

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Jan-20 12:00:00 AM TO: 01-Feb-20 12:00:00 AM

Report Generated on : 01-Feb-20 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1757287893	0	1797911140	0	40623248	0
PML- GEN # 2 (Check)	3806250711	0	3870903758	0	64653047	0
PML- GEN # 3 (CHECK)	4765098119	146	4813322887	146	48224769	0
PML- GEN # 4 (CHECK)	11590188481	23366	11662987081	23366	72798600	0
PML- GEN # 5	7404727894	206	7487631688	206	82903794	0
				Total Generation (PML)	309203456	
PML- GEN # 1 (G1B)	8192885448	340	8233142255	340	40256807	0
PML- GEN # 2 (G2B)	13613612142	469	13677783096	469	64170954	0
PML- GEN # 3 (G3B)	13904008008	544	13952001590	544	47993582	0
PML GEN # 4 (G4B)	11646765273	376	11719822843	376	73057570	0
PML GEN # 5 (G5B)	7402923862	1525	7485680214	1525	82756353	0
				Total Generation (Alpha)	308235265	
EXPORT						
PML- LINE # 1	8601830368	214369	8639120936	214369	37290568	0
PML- LINE # 2	0	0	0	0	37290568	0
PML- LINE # 3	7920967888	106130	7956534622	106130	35566734	0
PML- LINE # 4	2936865093	49815	2971637670	49815	34772577	0
PML- LINE # 5	4237624804	10127273	4282559172	10127273	44934368	0
PML- LINE # 6	1547985727	766	1563675746	766	15690019	0
PML- LINE # 7	879556672	127713512	885405632	127713512	5848960	0
PML- LINE # 8	778764992	38821892	784840192	38821892	6075200	0
PML- LINE # 9	2631551627	40	2659371856	40	27820229	0
				Total 132 KV export	245289223	0
PML- 33 kV ST1	2545466640	2628	2560823777	2628	15357137	0
PML- 33 kV ST2	2093910016	8755	2093992358	8755	82342	0
PML- 33 kV ST3	0	148	0	148	0	0
				Total 33 KV export	15439479	0
PML- 132 kV ST1	2721379747	663969	2737498102	663974	16118354	6
PML- 132 kV ST2	2181794564	1093850	2181984947	1240865	190383	147015
PML- 132 kV ST3	1775778518	1948436	1794203426	1948436	18424908	0
				ST 132 KV total	34733645	147021
PML- 6.6 kV C1 (T1C)	24295993	866	25270304	866	974311	0
PML- 6.6 kV C2 (T2C)	48614770	93787	48731057	93787	116287	0
PML- 6.6 kV C5 (T3C)	4197078	186	6213655	186	2016577	0
				Total 6.6 KV station load	3107175	0
PML- 132 kV GT1 (G1A)	7212263087	8410	7248546463	8410	36283376	0
PML- 132 kV GT2 (G2A)	0	46659	0	46659		0
PML- 132 kV GT3 (G3A)	12726665208	2889	12770691515	2896	44026307	7
PML- 132 kV GT4 (G4A)	8545525507	17972	8611861800	17972	66336293	0
PML- 132 kV ICT1 (G5A)	5002689734	1100	5078547345	1102	75857611	3
				Total GT export at 132 KV	222503587	10
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2965965	0	2965965	0	0	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49581368	380195	49581368	380195	0	0
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	349	6167915	110627	6167915	110278	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	91	1682341	54526	1682341	54435	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	11942212	35514523	12019379	35514523	77167	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	18875950	15291909	19639350	15291909	763400	0
PML - 6.6 KV C1to C8 (TIE U5) T9	34263644	4012932	34486284	4012955	222640	23
PML - 6.6 KV C5 to C9 (TIE U5) T10	33417561	534	33428544	1020	10983	486
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459626	30	3459626	30	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3234678	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	95998444	3	98058916	3	2060472	0
PML - 6.6 KV U1B (Unit I/C U1)	16532105	99	18378926	99	1846821	0
PML - 6.6 KV U2A (Unit I/C U2)	6260993	31	8939063	31	2678070	0
PML - 6.6 KV U2B (Unit I/C U2)	52903093	104	55158959	104	2255866	0
PML - 6.6 KV U3A (Unit I/C U3)	78697485	28	80890317	28	2192832	0
PML - 6.6 KV U3B (Unit I/C U3)	18738064	28	20929899	28	2191835	0
PML - 6.6 KV U4A (Unit I/C U4)	13499569	55	16063231	55	2563662	0
PML - 6.6 KV U4B (Unit I/C U4)	91229114	62	176873	62	3618554	0
PML - 6.6 KV U5A (Unit I/C U5)	3743201	0	7038101	0	3294900	0

PML - 6.6 KV U5B (Unit I/C U5)	121752	0	3355974	0	3234222	0
C1 - BPRS 6.6 KV Feeder F1	676.20	0	676.20	0	0	0
BPRS - Jemco reveocery F2	1636.68	0	1637.85	0	1170	0
				Total consumption by unit bus from Station	398336	509
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-1170	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1231498		1245229		13731000	
Cummins feeder at Cummins end	18147		19496		1349000	
Lafarge feeder at Lafarge end	163358		180473		17115000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1210328	1223474	15775200	MF 1200000		
Lin # 9 SECURE METER Reading	2747.73	2775.73	28000000	MF 1000000		

Reactive Generation Readings					
	KVARH	MVAR			
Generator # 1 reactive	22421504	30.14	Generator # 4 reactive	36794880	49.46
Generator # 2 reactive	22871552	30.74	Generator # 5 reactive	37977600	51.05
Generator # 3 reactive	18896896	25.40			

Compressor Readings						
	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	14283529	2	14402746	2	119217	0
Air Comp 1B (U1B Bus)	14263919	2	14399675	2	135756	0
Air Comp 2A (U2A Bus)	2764136	20	3025384	20	261248	0
Air Comp 2B (C3 Bus)	19202940	8	19276813	8	73873	0
Air Comp 2C (U3A Bus)	74333344	0	74661067	0	327723	0
Air Comp 4A (U 4A Bus)	18721920	1680	18896010	1680	174090	0
Air Comp 4B (U 4B Bus)	28562445	2	28971829	2	409384	0
Air Comp 5B (U5B Bus)	37472686	3727	37964203	3727	491517	0
				Toatal Comp Load	1992808	

CLPH unit # 1 Readings					
CLPH INC 1	10738.00		10869.00		131000
CLPH INC 2	7845.00		7902.40		57400
CT FAN BUS A SIDE	4116.00		4184.00		68000
CT FAN BUS B SIDE	4129.00		4163.10		34100
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					86300

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Jan-20 12:00:00 AM TO: 01-Feb-20 12:00:00 AM

Report Generated on : 01-Feb-20 12:00:00 AM

Total Station Load (C1 + C2+ C5)	3103667	Total station to unit tie load	398336	2705331	< allocated load
Total Compressor load on units	1918935	Total common load on CLPH bus for allocation		86300	

	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	40256807	64170954	47993582	73057570	82756353	308235265
Unit Load	3973431	5323640	3967275	6620561	6898742	26783648
Compressor Load allocation	250621	399500	298787	454824	515204	1918935
CLPH load allocation	11271	17967	13437	20455	23170	86300
Corrected Unit Load	3894050	5479858	3951775	6512366	6945599	26783648
% Unit Consumption	9.67	8.54	8.23	8.91	8.39	8.69%
Allocated Station Load	353327	563218	421232	641214	726339	2705331
Station to unit consumption	0	0	164713	0	233623	398336
Total station load for each unit	353327	563218	585945	641214	959962	3103667
% station load	0.88%	0.88%	1.22%	0.88%	1.16%	1.01%
Total Aux. consumed by unit	4247377	6043076	4537720	7153580	7905561	29887315
% of Aux. Consumption	10.55%	9.42%	9.45%	9.79%	9.55%	9.70%
Deemed PLF	100.00%	100.00%	80.15%	100.00%	99.60%	
P L F %	80.16%	71.88%	53.76%	81.83%	92.69%	75.67%

Tisco Representative

Name: Mr. C N S Gautam & Ms Rosalin Samal

Signature

Date & Time 01-Feb-20 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko, Ms. Suchismita Nayak

Signature

Date & Time 01-Feb-20 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C1,C2,C5 ie. T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.

TATA POWER COMPANY LIMITED
JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Feb-20 12:00:00 AM TO: 01-Mar-20 12:00:00 AM
Report Generated on : 01-Mar-20 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1797911140	0	1806579984	0	8668844	0
PML- GEN # 2 (Check)	3870903758	0	3927725980	0	56822222	0
PML- GEN # 3 (CHECK)	4813322887	146	4862727314	146	49404427	0
PML- GEN # 4 (CHECK)	11662987081	23366	11737022800	23366	74035719	0
PML- GEN # 5	7487631688	206	7565207277	211	77575590	5
				Total Generation (PML)	266506301	
PML- GEN # 1 (G1B)	8233142255	340	8242098638	340	8956384	0
PML- GEN # 2 (G2B)	13677783096	469	13734549451	469	56766355	0
PML- GEN # 3 (G3B)	13952001590	544	14001465862	545	49464272	1
PML GEN # 4 (G4B)	11719822843	376	11794056008	378	74233165	2
PML GEN # 5 (G5B)	7485680214	1525	7563116669	1530	77436455	5
				Total Generation (Alpha)	266356631	
EXPORT						
PML- LINE # 1	8639120936	214369	8671115930	214369	31994994	0
PML- LINE # 2	0	0	0	0	31693269	0
PML- LINE # 3	7956534622	106130	7989394060	106130	32859438	0
PML- LINE # 4	2971637670	49815	3003017427	49816	31379757	1
PML- LINE # 5	4282559172	10127273	4315142339	10140094	32583167	12821
PML- LINE # 6	1563675746	766	1578379981	766	14704235	0
PML- LINE # 7	885405632	127713512	890686720	127713512	5281088	0
PML- LINE # 8	784840192	38821892	790333952	38822528	5493760	636
PML- LINE # 9	2659371856	40	2686051138	40	26679282	0
				Total 132 KV export	180975720	13458
PML- 33 kV ST1	2560823777	2628	2569965213	2628	9141436	1
PML- 33 kV ST2	2093992358	8755	2097768362	8755	3776004	0
PML- 33 kV ST3	0	148	0	148	0	0
				Total 33 KV export	12917440	1
PML- 132 kV ST1	2737498102	663974	2746947074	677458	9448973	13484
PML- 132 kV ST2	2181984947	1240865	2187217820	1245510	5232872	4645
PML- 132 kV ST3	1794203426	1948436	1806672157	1948458	12468731	22
				ST 132 KV total	27150576	18151
PML- 6.6 kV C1 (T1C)	25270304	866	25784086	866	513782	0
PML- 6.6 kV C2 (T2C)	48731057	93787	50373620	93787	1642563	0
PML- 6.6 kV C5 (T3C)	6213655	186	6965999	186	752344	0
				Total 6.6 KV station load	2908689	0
PML- 132 kV GT1 (G1A)	7248546463	8410	7256593040	8410	8046577	0
PML- 132 kV GT2 (G2A)	0	0	0	0		0
PML- 132 kV GT3 (G3A)	12770691515	2896	12815812937	2896	45121422	0
PML- 132 kV GT4 (G4A)	8611861800	17972	8679413712	17975	67551912	3
PML- 132 kV ICT1 (G5A)	5078547345	1102	5149666457	1106	71119112	4
				Total GT export at 132 KV	191839022	3
PML - 6.6 KV C1 to U1A (TIE-U1) T1	2965965	0	3048998	0	83033	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49581368	380195	49666432	380199	85064	4
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	110627	6167915	130828	6167915	20201	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	54526	1682341	84591	1682341	30065	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	12019379	35514523	12115870	35514523	96491	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	19639350	15291909	20350714	15291909	711364	0
PML - 6.6 KV C1to C8 (TIE U5) T9	34486284	4012955	34486284	4012955	0	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	33428544	1020	33669678	1020	241134	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3459626	30	3498158	31	38532	1
PML - 6.6 KV C7 to U4B (TIE U3) T6	3234678	8	3258327	8	23649	0
PML - 6.6 KV U1A (Unit I/C U1)	98058916	3	98549642	3	490726	0
PML - 6.6 KV U1B (Unit I/C U1)	18378926	99	18780950	99	402024	0
PML - 6.6 KV U2A (Unit I/C U2)	8939063	31	11591860	31	2652797	0
PML - 6.6 KV U2B (Unit I/C U2)	55158959	104	57086914	104	1927955	0
PML - 6.6 KV U3A (Unit I/C U3)	80890317	28	80890317	28	0	0
PML - 6.6 KV U3B (Unit I/C U3)	20929899	28	20929899	28	0	0
PML - 6.6 KV U4A (Unit I/C U4)	16063231	55	18566859	55	2503628	0
PML - 6.6 KV U4B (Unit I/C U4)	176873	62	3776119	62	3599246	0
PML - 6.6 KV U5A (Unit I/C U5)	7038101	0	9654270	0	2616169	0

PML - 6.6 KV U5B (Unit I/C U5)	3355974	0	6753474	0	3397500	0
C1 - BPRS 6.6 KV Feeder F1	878.28	0	876.29	0	0	0
BPRS - Jemco reveocery F2	1837.73	0	1841.73	0	3880	0
				Total consumption by unit bus from Station	3321373	4
(F1-F2) ,IF F1 > F2, (F1-F2) will be deducted from total station load, else added to station Load					-3880	
33 KV O/G feeder readings as reported by TSL						
Telco feeder at Telco end	1245229		1252525		7296000	
Cummins feeder at Cummins end	19496		20770		1274000	
Lafarge feeder at Lafarge end	180473		196631		16158000	
132 KV line 9 and 6 secure meter readings as noted by TSL						
Lin # 6 SECURE METER Reading	1223474	1235693	14662800	MF 1200000		
Lin # 9 SECURE METER Reading	2775.73	2802.58	26850000	MF 1000000		

Reactive Generation Readings

	KVARH	MVAR			
Generator # 1 reactive	4372480	6.28	Generator # 4 reactive	38386688	55.15
Generator # 2 reactive	18932224	27.20	Generator # 5 reactive	37341696	53.65
Generator # 3 reactive	17637376	25.34			

Compressor Readings

	Initial Readings		Final Readings		Net Readings	
	KWH Del	KWH Rec	KWH Del	KWH Rec	Net KWH Del	Net KWH Rec
Air Comp 1A (U1A Bus)	14402746	2	14441528	2	38782	0
Air Comp 1B (U1B Bus)	14399675	2	14458630	2	58955	0
Air Comp 2A (U2A Bus)	3025384	20	3349361	20	323977	0
Air Comp 2B (C3 Bus)	133365	8	325620	0	192255	-8
Air Comp 2C (U3A Bus)	74661067	0	74863091	0	202024	0
Air Comp 4A (U 4A Bus)	18896010	1680	19110749	1680	214739	0
Air Comp 4B (U 4B Bus)	28971829	2	29385121	2	413292	0
Air Comp 5B (U5B Bus)	37964203	3727	38366419	3727	402216	0
				Toatal Comp Load	1846240	

CLPH unit # 1 Readings

CLPH INC 1	10869.00		10958.00		89000
CLPH INC 2	7902.40		7914.00		11600
CT FAN BUS A SIDE	4184.00		4199.00		15000
CT FAN BUS B SIDE	4163.10		4169.30		6200
Common Load on CLPH Unit 1 (inc1 + inc 2 - CT fan bus A - CT fan bus B)					79400

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Feb-20 12:00:00 AM TO: 01-Mar-20 12:00:00 AM

Report Generated on : 01-Mar-20 12:00:00 AM

Total Station Load (C1 + C2+ C5)	2717850	Total station to unit tie load	521678	2196172	< allocated load
Total Compressor load on units	1846240	Total common load on CLPH bus for allocation		79400	

	Unit # 1	Unit # 2	Unit # 3	Unit # 4	Unit # 5	Station
Generation	8956384	56766355	49464272	74233165	77436455	266856631
Unit Load	909807	4884870	4381793	6548273	6317343	23042086
Compressor Load allocation	61964	392736	342217	513580	535742	1846240
CLPH load allocation	2665	16890	14718	22087	23040	79400
Corrected Unit Load	797299	4970520	4536704	6455909	6473909	23234341
% Unit Consumption	8.90	8.76	9.17	8.70	8.36	8.71%
Allocated Station Load	73709	467175	407080	610923	637285	2196172
Station to unit consumption	168097	0	50266	62181	241134	521678
Total station load for each unit	241806	467175	457346	673104	878419	2717850
% station load	2.70%	0.82%	0.92%	0.91%	1.13%	1.02%
Total Aux. consumed by unit	1039105	5437694	4994050	7129013	7352329	25952191
% of Aux. Consumption	11.60%	9.58%	10.10%	9.60%	9.49%	9.73%
Deemed PLF	23.72%	100.00%	93.65%	98.09%	97.54%	
P L F %	19.06%	67.97%	59.22%	88.88%	92.72%	70.03%

Tisco Representative

Name: Mr. C N S Gautam & Ms Vanita

Signature

Date & Time 01-Mar-20 12:00:00 AM

TPCL Representative

Name: Mr.Boban Chacko, Ms. Suchismita Nayak

Signature

Date & Time 01-Mar-20 12:00:00 AM

The Above calculations are made on he basis of mutual uderstanding between TATA STEEL and TATAPOWER COMPANY LIMITED on 29th OCT'2011. For Unit 1,2 and 3 the unit Aux. calculated as difference of 11KV meter reading and 132 KV meter reading after GT of each unit as Unit load . for Unit 4 and 5 Unit I/C load recorded by 6.6 KV end meters plus

TATA POWER COMPANY LIMITED

JOJOBERA POWER PLANT

MONTHLY GENERATION REPORT FROM: 01-Mar-20 12:00:00 AM TO: 01-Apr-20 12:00:00 AM

Report Generated on : 01-Apr-20 12:00:00 AM

FEEDER NAME	INITIAL READINGS		FINAL READINGS		DIFFERENCE	
	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT	KWH EXPORT	KWH IMPORT
GENERATION						
PML- GEN # 1 (Check)	1806579984	0	1828727650	0	22147666	0
PML- GEN # 2 (Check)	3927725980	0	3984130226	0	56404247	0
PML- GEN # 3 (CHECK)	4862727314	146	4903285421	146	40558107	0
PML- GEN # 4 (CHECK)	11737022800	23366	11805486218	23366	68463419	0
PML- GEN # 5	7565207277	211	7640930990	211	75723713	0
				Total Generation (PML)	263297151	
PML- GEN # 1 (G1B)	8242098638	340	8264268443	340	22169805	0
PML- GEN # 2 (G2B)	13734549451	469	13790602279	469	56052828	0
PML- GEN # 3 (G3B)	14001465862	545	14042014741	545	40548880	0
PML GEN # 4 (G4B)	11794056008	378	11862673016	378	68617008	0
PML GEN # 5 (G5B)	7563116669	1530	7638703635	1530	75586966	0
				Total Generation (Alpha)	262975486	
EXPORT						
PML- LINE # 1	8671115930	214369	8704839576	214369	33723645	0
PML- LINE # 2	0	0	0	0	33161180	0
PML- LINE # 3	7989394060	106130	8021445779	106130	32051719	0
PML- LINE # 4	3003017427	49816	3031334517	49816	28317090	0
PML- LINE # 5	4315142339	10140094	4355483230	10140094	40340891	0
PML- LINE # 6	1578379981	766	1592564089	766	14184108	0
PML- LINE # 7	890686720	127713512	896728768	127713512	6042048	0
PML- LINE # 8	790333952	38822528	796583744	38822528	6249792	0
PML- LINE # 9	2686051138	40	2704752299	40	18701161	0
				Total 132 KV export	212771635	0
PML- 33 kV ST1	2569965213	2628	2579627218	2628	9562005	0
PML- 33 kV ST2	2097768362	8755	2098772182	8755	1003821	0
PML- 33 kV ST3	0	0	0	0	0	0
				Total 33 KV export	10565826	0
PML- 132 kV ST1	2746947074	677458	2756480281	683111	9533207	5653
PML- 132 kV ST2	2187217820	1245610	2189043668	1252084	1825849	6574
PML- 132 kV ST3	1806672157	1948458	1819617846	1948463	12945689	5
				ST 132 KV total	24304744	12232
PML- 6.6 kV C1 (T1C)	25784086	866	25984007	866	199921	0
PML- 6.6 kV C2 (T2C)	50373620	93787	51353770	93787	980150	0
PML- 6.6 kV C5 (T3C)	6965999	186	9004027	186	2038028	0
				Total 6.6 KV station load	3218099	0
PML- 132 kV GT1 (G1A)	7256593040	8410	7276301724	8416	19708684	5
PML- 132 kV GT2 (G2A)	0	0	0	0		0
PML- 132 kV GT3 (G3A)	12816812937	2896	12852701285	2898	36888349	2
PML- 132 kV GT4 (G4A)	8679413712	17975	8741450980	17975	62037268	0
PML- 132 kV ICT1 (G5A)	5149666457	1106	5218647621	1118	68981164	12
				Total GT export at 132 KV	187615465	20
PML - 6.6 KV C1 to U1A (TIE-U1) T1	3048998	0	3145187	0	96189	0
PML - 6.6 KV C2 to U1B (TIE U1) T2	49666432	380199	49725755	381523	59323	1324
PML - 6.6 KV C3 to U2A (TIE U2) T3	3415811	73	3415811	73	0	0
PML - 6.6 KV C4 to U2B (TIE U2) T4	9132807	52	9132807	52	0	0
PML - 6.6 KV C3 to U3A (TIE U3)T5	130828	6167916	212795	6167916	81967	0
PML - 6.6 KV C4 to U3B (TIE U3) T6	84591	1682341	155256	1682341	70665	0
PML - 6.6 KV C2 to C6 (TIE U4) T7	12115870	35514523	12308504	35514523	192634	0
PML - 6.6 KV C5 to C7 (TIE U4) T8	20350714	15291909	20997336	15291909	646621	0
PML - 6.6 KV C1to C8 (TIE U5) T9	34486284	4012955	34486284	4012955	0	0
PML - 6.6 KV C5 to C9 (TIE U5) T10	33669678	1020	34007752	1020	338074	0
PML - 6.6 KV C6 to U4A (TIE U3)T5	3498158	31	3498158	31	0	0
PML - 6.6 KV C7 to U4B (TIE U3) T6	3258327	8	3258327	8	0	0
PML - 6.6 KV U1A (Unit I/C U1)	98549642	3	99736180	3	1186538	0
PML - 6.6 KV U1B (Unit I/C U1)	18780950	99	19875043	99	1094093	0
PML - 6.6 KV U2A (Unit I/C U2)	11591860	31	14292170	31	2700310	0
PML - 6.6 KV U2B (Unit I/C U2)	57086914	104	59121404	104	2034490	0
PML - 6.6 KV U3A (Unit I/C U3)	80890317	28	80890317	28	0	0
PML - 6.6 KV U3B (Unit I/C U3)	2988820	28	2988820	28	0	0
PML - 6.6 KV U4A (Unit I/C U4)	18566859	55	21094986	55	2528127	0
PML - 6.6 KV U4B (Unit I/C U4)	3776119	62	7320900	62	3544781	0
PML - 6.6 KV U5A (Unit I/C U5)	9654270	0	2475462	0	2821192	0

0.6 % of generation as transformer losses is considered as unit load. Total station load is calucluated from the station I/C of C1,C2,C5 ie, T1C, T2C, T3C less tie loading of each units as common and aportionated to all units on the basis of generation in addition to station to unit TIE loading. Compressors connected to unit bus are metered apportioned on the basis of generation. Common load connected to CLPH MCC derived and apportioned to units on the basis of generation.**Line 9 Sep'18 month readings have considered from Initial & Final manual readings taken by TISCO.**

ANNEXURE R2

Mitra S. K. Private Limited

TESTING • INSPECTION

Shrachi Centre (5th Floor)
74B, Acharya Jagadish Chandra Bose Road
Kolkata – 700 016, West Bengal, India
CIN: U51909WB1956PTC023037

T : 91 33 22172249 / 40143000 / 22650006 / 22650007
F : 91 33 22650008
E : info@mitrask.com
W : www.mitrask.com

STATEMENT OF COAL SAMPLING AND ANALYSIS -UN LOADING POINT

For the Month : **March '2020**

Type of Coal : **Middling Coal**

Rake No.	RR NO	COMMODITY	QTY(MT)	DATE OF SAMPLING	DATE OF PREPARATION	TM % (ARB)	Proximate Analysis (ADB)				GCV (Kcal/kg) (ADB)	GCV (Kcal/kg) (ARB)	Analysis Result Of Equilibrated Condition of 60% RH 40°C Temp/GCV/IS 1350(Part-I)-1984 Reaff-2013				
							IM %	ASH %	VM %	FC %			IM %	ASH %	VM %	FC %	GCV Kcal/Kg
9975	162000368	WB	3799.460	01-03-2020	02-03-2020	4.95	1.16	43.27	17.61	37.96	4101	**3943.75**	1.04	**43.32**	**17.63**	38.01	**4106**
10001	462004887	WB	3792.300	26-03-2020	27-03-2020	5.17	1.41	41.46	18.45	38.68	4182	4022.51	1.29	41.51	18.47	38.73	4187
10004	462004891	WB	3915.450	28-03-2020	29-03-2020	4.37	1.33	41.54	17.92	39.21	4001	3877.73	1.15	41.62	17.95	39.28	4008
TOTAL			11507.210			4.83	1.30	42.09	17.99	38.62	4095	3948.00	1.16	42.15	18.02	38.67	4100

DISCLAIMER

Please note that the quantity is declared by M/S TATA POWER COMPANY LIMITED
Sampling:-IS-436 Part-I,1964, Reaff:-2007
Test Protocol :- Total Moisture & Proximate -IS 1350 (Part - I)-1984 Reaff-2013 and GCV - ASTM D 5865-13
Abbreviation:- TM : Total Moisture, **IM :** Analysis Sample Moisture, **VM :** Volatile Matter, **FC :** Fixed Carbon,
GCV : Gross Calorific Value, **ARB :** As Received Basis & **ADB :** Air Dry Basis

This report is a worksheet for internal purposes only. Mitra SK has no responsibility and / or liability whatsoever for the consequences of any action taken or not taken on the basis of this Report. All orders are accepted and all reports and certificates issued subject to the General Conditions of Service which are accessible at www.mitrask.com

The above reflects our findings at time and place of Inspection. This Status does not relieve sellers/suppliers from their contractual responsibilities nor does prejudice buyer's right of claim towards seller/Supplier for compensation for any apparent and/or hidden defects not detected during our random Inspection or occurring thereafter.

The manual sampling method was agreed with the Mitra SK Principal, as sampling by more reliable methods that provide probability samples was not possible. The Holder of this document is cautioned that collected MANUAL samples of this type do not satisfy the minimum requirements for probability sampling, and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

The consignment from which the samples were collected had a nominal top size of over 80millimeter.While the sampling method was agreed upon by all parties to this report,due to the limited ability to extract representative increments from the cargo,the samples collected will not necessarily be representative of the entire cargo. Mitra SK has no responsibility and /or liability for the consequences of any action taken or not taken on the basis of this report.

For Mitra S. K. Private Limited

Authorised Signatory

ANNEXURE R3

रेलवे रसीद / Railway Receipt

RR No. : आर आर सं. 412000612 PAID FOREIGN

Com. G. 25 काम जी. २५ | Form फार्म COM.G. 25 | R.R. No. आर आर सं. 412000612

FNR : 20012090746

RR Date रे.र.तारीख	Invoice No. इन्वायस सं.	F. Note No. अ.प.संख्या	TRFC TYPE ट्रैफिक किस्म	No. of wagons In Four Wheelers डिब्बो का नं. चौपहियों में	Risk Rate जोखिम दर	Zone Code जोन कोड	Gauge Code लाइन कोड	CHRG Dist. प्रभार दूरी	Handled by वाहक	Rate Type रेट टाइप	Class श्रेणी	Total Chargeable Weight कुल प्रभारित वजन	Weight Unit वजन युनिट	Rs. दर	P. पै.
17/01/20	16/01/20	09/01/20	PC	29	OR	1	1	211	P	C	145A	1987	T	672.5	2*

Punitive Charge For Overloading अधिक लदान के लिए दंड प्रभार

Class श्रेणी	Rate दर	Class श्रेणी	Rate दर
145A	1345	3*200	1552.2

20 From Station/Siding से स्टेशन/साईडिंग PURE SITALPUR COLLY SIDING Code कोड SCU 2119532

21 To Station/Siding रुक स्टेशन/साईडिंग 19-WEST BENGAL Code कोड PTJT 7220359

Pvt siding of M/s TATA Power Company Ltd at Jojobera 20-JHARKHAND

Charged Via प्रभारित वाया UDL-KPK-DMA-MDKD-RKI-JOC-GRB-ANR-PRR-CNI-GMH-TATA

Train/Wagon Load गाड़ी/माल डिब्बा लदान T | Inv. At इन्वॉयस कहां बनी | Delivery Book/Folio No. डुपुर्दगी,/फोलियो नं. SCU | For RMC रेल सामग्री हेतु

22 Sender's Name & Address/ भेजने वाले का नाम व पता

M/S EASTERN COAL FIE LD SANTORIA P.O DISHER GARH ECF(19AAACE7590E1ZI)

23 Consignee's Name & Address/ प्राप्तकर्ता का नाम व पता

TPP. TATA POWER COMPA NY LTD PT.JT TPL(20AAACT0054A2ZE)

Code/कोड

Description of Goods सामान का विवरण				Weighment Particulars वजन संबंधी विवरण			
24 Commodity Code सामान कोड	25 No. of Articles सामान की संख्या	26 Packaging Code पैकिंग कोड	27 Pvt. Mark निजी मार्क	28 Sender's Weight प्रेषक का वजन	29 Actual Weight वास्तविक वजन	30 Chargeable Weight at Nor. Rate वास्तविक वजन सामान्य दर पर	31 Over Wt. Chargeable at Pun. Rate दैंड दर पर अधिक व. प्रभार
2991141	0	1		0	1867.6	1987	4

GST PARTICULARS : 81
GST AMOUNT RS.67118(IGST@5%=RS.67117.1)
TYPE:TRANSPORTATION OF GOODS BY RAIL, HSN CODE:996512
EXEMPTION : RC 19 OF 2017 DT: 30.06.2017

32 Freight माल भाड़ा	Other Charges अन्य प्रभार		Rebate छूट		Paid on Charge प्रदत्त प्रभार		Total Freight कुल भाड़ा	Under Charges कम प्रभार		Over Charge अधिक प्रभार	
	33 Code कोड	34 Amount रकम	35 Code कोड	36 Amount रकम	37 Code कोड	38 Amount रकम	39 Amount रकम	40 Code कोड	41 Amount रकम	42 Code कोड	43 Amount रकम
1336257.5	POL2	5277.48					1409460				
	POL1	807									
	*GST	67118									

Allocation and other details आवंटन व अन्य विवरण

44 Actt's head खाता शीर्ष

45 Dept. to be Debited नामे विभाग

46 A.Officer लेखा अधिकारी

47 S. No. क्रम सं.	48 Own RLY. मालिक रेलवे	49 Type टाइप	50 Wagon No. माल डिब्बा नं.	51 CC Tonnes सीसी/ टनों	52 Tare टेयर	53 No of Articles वस्तुओं की संख्या	54 Commodity Code सामान	55 Gross Weight कुल वजन	Dip/Measurement डिप/माप 56 D.Ms./Lts. डी. एम्./लि.	57 Weight वजन	58 Actual Weight वास्तविक	59 Perm CC Tonnes अनुमेय टनों में	Over Weight Chargeable at अधिक वजन पर प्रभार वसूली की 60 Total जोड़	61 Norm. Rate सामान्य दर	62 Pun. Rate दंडात्मक दर	63 Chargeable Weight वसूली वजन	64 S. No. क्रम	65 Own RLY मालिक	66 Type टाइप	67 Wagon No. माल डिब्बा नं.	68 CC Tonnes सीसी/	69 Tare टेयर	70 No. of Articles वस्तुओं की संख्या	71 Commodity Code सामान	72 Gross Weight कुल वजन	Dip/Measurement डिप/माप 73 D.Ms/Lts डी एम् /लि.	74 Weight वजन	75 Actual Weight वास्तविक	76 Perm CC Tonnes अनुमेय टनों में	Over Weight Chargeable at अधिक वजन पर प्रभार वसूली की 77 Total जोड़	78 Norm. Rate सामान्य दर	79 Pun. Rate दंडात्मक दर	80 Chargeable Weight वसूली वजन
1	CR	BOXN	060038	70	22.48	0	2991141	89.8		0	67.32	68	0	0	0	0	15	SE	BOXN	30121	70	22.48	0	2991141	85		0	62.52	68	0	0	0	0
2	EC	BOXN	59240	70	22.48	0	2991141	85.5		0	64.12	68	0	0	0	0	17	SE	BOXN	67664	70	22.48	0	2991141	82.4		0	59.92	68	0	0	0	0
3	EC	BOXNHL	065471	70	20.6	0	2991141	90		0	69.4	70	0	0	0	0	18	SE	BOXN	061561	70	20.6	0	2991141	88.2		0	65.72	68	0	0	0	0
4	ER	BOXN	76717	70	22.48	0	2991141	86.2		0	63.72	68	0	0	0	0	19	SE	BOXN	25106	70	22.48	0	2991141	83.4		0	60.92	68	0	0	0	0
5	NC	BOXN	40377	70	22.48	0	2991141	85.8		0	63.32	68	0	0	0	0	20	SE	BOXN	62734	70	22.48	0	2991141	87.8		0	65.32	68	0	0	0	0
6	NC	BOXNHL	15700	70	20.6	0	2991141	86.2		0	65.6	70	0	0	0	0	21	SE	BOXNHL	78776	70	20.6	0	2991141	91.6		0	71	70	1	1	0	71
7	NE	BOXN	06625	70	22.48	0	2991141	89.6		0	58.12	68	0	0	0	0	22	SEC	BOXNHL	18949	70	20.6	0	2991141	89.2		0	68.6	70	0	0	0	0
8	NF	BOXN	00475	70	22.48	0	2991141	84.2		0	61.72	68	0	0	0	0	23	SR	BOXN	10112	70	22.48	0	2991141	86.2		0	63.72	68	0	0	0	0
9	NF	BOXN	08527	70	22.48	0	2991141	85.6		0	63.12	68	0	0	0	0	24	SW	BOXN	16358	58.6	22.48	0	2991141	83.6		0	61.12	68	0	0	0	0
10	NR	BOXN	60388	58.6	22.48	0	2991141	84		0	61.52	68	0	0	0	0	25	WC	BOXN	41610	58.6	22.48	0	2991141	87.6		0	65.12	68	0	0	0	0
11	NR	BOXN	60578	58.6	22.48	0	2991141	86.6		0	64.12	68	0	0	0	0	26	WC	BOXN	Z8860	58.6	22.48	0	2991141	81.4		0	58.92	68	0	0	0	0
12	SC	BOXN	61306	58.6	22.48	0	2991141	84.6		0	62.32	68	0	0	0	0	27	WC	BOXNHL	17526	70	20.6	0	2991141	95		0	74.4	70	4.4	1	3.4	71
13	SC	BOXN	30330	58.6	22.48	0	2991141	83.6		0	61.32	68	0	0	0	0	28	WC	BOXNHL	43092	70	20.6	0	2991141	92.2		0	71.6	70	1.6	1	.6	71
14	SE	BOXN	99033	58.6	22.48	0	2991141	87.9		0	65.32	68	0	0	0	0	29	WR	BOXN	61233	58.6	22.48	0	2991141	86.4		0	63.92	68	0	0	0	0
15	SE	BOXN	61867	58.6	22.48	0	2991141	86.2		0	63.72	68	0	0	0	0																		

TAX Invoice Number:9920011923080878 GSTIN OF SUPPLIER: KAKOLI GHOSHAL 19AAAGM0289C1ZG FOR 19-WEST BENGAL
GSTIN OF CUSTOMER : 20AAACT0054A2ZE FOR 20-JHARKHAND

STEAM COAL (RAKE DEMAND)
QLFD RMRK: OPEN WAGON LOADED AT REQUEST & RISK OF SENDER.#TRAIN LOAD CONDITIONS COMPLIED WITH.#LOADING DONE IN SIDING, NOT SUPERVISED BY RAILWAY STAFF.## NOTE : 14214-PACKAGING CONDITION OUTER NOT COMPLIANT. PACKING CLUBBED WITH INVOICE NUMBERS 27 TO 29 FOR PT. JT AND BENEFIT OF TRAIN LOAD RATE GRANTED.##. DESTINATION TO ENSURE COLLECTION OF UNDER CHARGES IF DUE ON ACCOUNT OF NON LOADING O F OTHER DEMANDS / FNOTES. #TLOAD CONDITION FULFILLED.DEFAULT POL SITUATION CODE : A.#COAL GRADE: U## SALES TAX NOT APPLICABLE. #

Commodity Description सामान का विवरण BANK DRAFT/BANKER'S CHEQUE 374022 30-12-19 HDFC Rs 1409460/-

Remarks टिप्पणी

Payment Mode : भुगतान पद्धति

Stationery Number स्टेशनरी क्र. सं. A- 7316014

6014

9916 21.01.2020

UKHPC-V-SDG 23422 Station Stamp स्टेशन की स्टेम्प

Sig. Station Master स्टेशन मास्टर के हस्ताक्षर Chief Weigh Clerk UKA-V-Sdg

58 GSM Kuantum Papers Ltd.

WESTERN RAILWAY (RR)

68

EASTERN COALFIELDS LIMITED
(SUBSIDIARY OF COAL INDIA LIMITED.)
Tax Invoice (GST INV -1)(Rule 46)
Sale of Raw Coal (Credit Sale)
CIN - U10101WB1975GOI030295

Original for Recipient
Duplicate for Transporter
Triplicate for supplier

GSTIN: 19AAACE7590E1ZI
Name: Eastern Coalfields Ltd

Address: Area: SONEPUR BAZARI
Colliery: S.B PROJECT
PO: WEST BENGAL Pin:

Invoice No: 170120C512401056
Date: 22/01/2020

Detail of Receiver [Billed to]

Consignee Name: THE TATA POWER COMPANY LIMITED [FWD].
Address: JOJOBERA POWER PLANTRAHARGORA JAMSHEDPUR 831016
State Name: JHARKHAND
Unique ID: 821199
GSTIN: 20AAACT0054A2ZE
State Code: 20

Detail of Consignee [Shipped to]

Consignee Name: THE TATA POWER COMPANY LIMITED [FW
Address: JOJOBERA POWER PLANTRAHARGORA JAMSHEDPUR 831016
State Name: JHARKHAND
Unique ID: 821199
GSTIN: 20AAACT0054A2ZE
State Code: 20

Place of Supply with name of state(in case of inter state Trade or commerce) -PTJT

Place of Delivery (where the same is different from the supply)

Description	HSN Code	Particulars	Quantity	Unit of Measurement (IN TONNE)	Rate	Amount (Rs)
Coal	27011990	Basic Rate:	2003.92		3450	6913524.00
		Evacuation Charge:				100196.00
		Wagon Loading Charge:			87	174341.04
		Weighment/Sizing Charges:	2003.92		61.00	122239.12
		Surface Trnsportation Charges:			20%	1202352.00
		RE Cess:20% on Basic ROM Notified Price			5%	300588.00
		PE Cess:5% on Basic ROM Notified Price				
		Bazar Fees:(Only Mugma area)			@Rs.6.5/MT	13025.48
		Royalty:			2%	260.51
		NMET:			30%	3907.64
		DMFT:				
		Silo Loading Charges:			@Rs.1/MT	2003.92
		AMBH Cess: (For Bengal Field)			@Rs.1/MT	2003.92
		PWD Road:(For Bengal Field)			@Rs.1/MT	0.00
		Management Fees: (For Jharkhand Field)				
		Total Value of Goods :				8834441.63
		Discount (if any):				0.00
		SGST:				0.00
		CGST:			5%	441722.08
		IGST:			400	801568.00
		Compensation cess:				
		Total Value of Goods With Tax :				10077731.71
		Less: Under Loading		706.13		27397.84
		Total Payable Amt:				10050333.87
		TCS:		0.00		0.00
		Net Payable Amt:				10050333.87

Net Payable Amt in Word Rupees One Crore Fifty Thousand Three Hundred Thirty-Three And Paise Eighty-Seven Only

TATA POWER
02 MAR 2020
RECEIVED ACCOUNTS

Grade:	6250	Load Date:	16/01/2020	RR No :	412000613	Lifted Qty :	2003.92
Size of Coal:	ROM(-100)	Despatch Date :		RR Date :	17/01/2020	UnderLoading Qty :	38.80
Ash% :		D Note No :	142153	Weighment :		Siding :	SITALPUR
Seam :	R-II & III	No Of Box :	29	Rake No :	62901	Sector :	SBP Mode: Rail

Wheather the Tax is payble on Reverse Charge: No

Declaration.....

Prepared By Aproved By Checked By Authority Signatory(Designation)

I/we certify that my/our registration certificate under the CGST/SGST/UGST/GST Comp.cess.2017 is in force on the date on which the supply of goods specified in this tax invoice is made by me/us and that the transaction of supply covered by this tax invoice has been effected by me/us and it shall be accounted for in the turnover of supply while filing of return and the tax,if any, payable on the supply has been paid or shall be

9916
21.01.2020

JPP WT-3744.20

2/2

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रेलवे रसीद / Railway Receipt

Com. G. 25 काम जी. २५ | Form फार्म COM.G. 25

R.R. No. आर आर सं. 412000613

RR No. आर आर सं. 412000613 PAID FOREIGN

TNR : 200109074788

RR Date र.र.तारीख	Invoice No. इन्वायस सं.	F. Note No. अ.प.संख्या	4 TRFC TYPE ट्रैफिक किस्म	5 No. of wagons in Four Wheelers डिब्बा का नं. चौपहियों में	6 Risk Rate जोखिम दर	7 Zone Code जोन कोड	8 Gauge Code गाइज कोड	9 CHRG Dist. प्रभार दूरी	10 Handled by संभाला	11 Rate Type रेट टाइप	12 Class श्रेणी	13 Total Chargeable Weight कुल प्रभारित वजन	14 Weight Unit वजन यूनिट	15 Rate Rs. प्रति रु.	P. पै.	Punitive Charge For Overloading अधिक लदान के लिए दंड प्रभार 16 Class श्रेणी	17 Rate दर	18 Class श्रेणी	19 Rate दर
17/01/20	25Date तारीख	26Date तारीख	PC	29	OR	1	1	211	P	C	145A	2037.4	T	672.5	2	1*145A	1345	3*200	1552.2

20 From Station/Siding से स्टेशन/साईडिंग: PURE SITALPUR COLLY SIDING — Code कोड: SCU 2119532

21 To Station/Siding तक स्टेशन/साईडिंग: D-WEST BENGAL / Pvt siding of M/s TATA Power Company Ltd at Jojobera 20-JHARKHAND — Code कोड: PTJT 07220359

Charged Via प्रभारित वाया: UDL-KPK-DMA-MDKD-RKI-JOC-GRB-ANR-PRR-CNI-GMH-TATA

Train/Wagon Load गाड़ी/डिब्बा लदान: T

Inv. At इन्वॉयस कहां बनी:

Delivery Book/Folio No. सुपुर्दगी/कोलियो नं.:

For RMC रेल सामग्री हेतु

58 GSM Kuantum Papers Ltd.

WESTERN RAILWAY (RR)

22 Sender's Name & Address/ भेजने वाले का नाम व पता:
M/S EASTERN COAL FIE LD
SANGTORIA P.O DISHER
GARH ECF(19AAACE7590E1ZI)

Description of Goods समान का विवरण: 24 Commodity Code सामान कोड: 2991141 | 25 No. of Articles सामान की संख्या: 0 | 26 Packaging Code पैकिंग कोड: 1 | 27 Pvt. Mark निजी मार्क:

Weighment Particulars वजन संबंधी विवरण: 28 Sender's Weight प्रेषक का वजन: 0 | 29 Actual Weight वास्तविक वजन: 2003.9 | 30 Chargeable Weight at Nor. Rate वास्तविक वजन सामान्य दर पर: 2037.4 | 31 Over Wt. Chargeable at Pun. Rate दंड दर पर अधिक व. प्रभार: 7.2

32 Freight माल भाड़ा: 1370151.5

THE TATA POWER COMPANY LTD
PTJT
TEL(20AAACT0054AZZE)
Code/कोड

GST PARTICULARS : 81
GST AMOUNT RS.69025(GST@5%=RS.69024.95)
TYPE:TRANSPORTATION OF GOODS BY RAIL, HSN CODE:996512
EXEMPTION : RC 19 OF 2017 DT: 30.06.2017

Other Charges अन्य प्रभार 33 Code कोड	34 Amount रकम	Rebate छूट 35 Code कोड	36 Amount रकम	Paid on Charge प्रदत्त प्रभार 37 Code कोड	38 Amount रकम	Totel Freight कुल भाड़ा 39 Amount रकम	Under Charges खम प्रभार 40 Code कोड	41 Amount रकम	Over Charge अधिक प्रभार 42 Code कोड	43 Amount रकम
POL2	4967.04					1449524				
POL1	5580									
*GST	69025									

Allocation and other details आबंटन व अन्य विवरण
44 Actt's head खाता शीर्ष
45 Dept. to be Debited नामे विभाग
46.A.Officer लेखा अधिकारी

47 S. No. क्रम	48 R Own ARLY मालिक	49 Type टाइप	50 Wagon No. माल डिब्बा नं.	51 CC / Tonnes क्षीसी/ टन	52 Tare टेयर	53 No of Articles वस्तुओं की संख्या	54 Commod-ity Code सामान कूल वजन	55 Gross Weight	Dip/Measurement डिप/माप 56 D.Ms./Lts. की एम./लि.	57 Weight वजन	58 Actual Weight वास्तविक वजन	59 Perm CC Tonnes अनुमेय ढुलाई क्षमता टनों में	Over Weight Chargeable at अधिक वजन पर प्रभार वसूली की 60 Total जोड़	61 Norm. Rate सामान्य दर पर	62 Pun. Rate दंडात्मक दर पर	63 Charge-able Weight वसूली योग्य वजन	64 S. No. क्रम	65 Own RLY मालिक	66 Type टाइप	67 Wagon No. माल डिब्बा नं.	68 CC Tonnes क्षीसी/ टन	69 Tare टेयर	70 No. of Articles वस्तुओं की संख्या	71 Commod-ity Code सामान	72 Gross Weight कुल वजन	Dip/Measurement डिप/माप 73 D.Ms/Lts की एम /लि.	74 Weight वजन	75 Actual Weight वास्तविक वजन	76 Perm CC Tonnes अनुमेय ढुलाई क्षमता टनों में	Over Weight Chargeable at अधिक वजन पर प्रभार वसूली की 77 Total जोड़	78 Norm. Rate सामान्य दर पर	79 Pun. Rate दंडात्मक दर पर	80 Charge-able Weight वसूली योग्य वजन
1	EC	BOXNHL	12560	70	20.6	0	2991141	90		0	69.4	70	0	0	0	70	16	ER	BOXNHL	12865	70	20.6	0	2991141	85.3		0	64.7	70	0	0	0	70
2	EC	BOXNHL	90361	70	20.6	0	2991141	89.4		0	68.8	70	0	0	0	70	17	NE	BOXNHL	10157	70	20.6	0	2991141	91.8		0	71.2	70	1.2	1	1	71
3	EC	BOXNHL	53455	70	20.6	0	2991141	90.2		0	69.6	70	0	0	0	70	18	NE	BOXNHL	64709	70	20.6	0	2991141	87.4		0	66.8	70	0	0	0	70
4	EC	BOXNHL	12197	70	20.6	0	2991141	91		0	70.4	70	.4	.4	0	70.4	19	SE	BOXNHL	67794	70	20.6	0	2991141	92.6		0	72	70	2	1	1	71
5	EC	BOXNHL	26562	70	20.6	0	2991141	90.2		0	69.6	70	0	0	0	70	20	SEC	BOXNHL	22000	70	20.6	0	2991141	90.2		0	69.6	70	0	0	0	70
6	EC	BOXNHL	12014	70	20.6	0	2991141	92		0	71.4	70	1.4	1	.4	71	21	SEC	BOXNHL	45239	70	20.6	0	2991141	87		0	66.4	70	0	0	0	70
7	EC	BOXNHL	49153	70	20.6	0	2991141	91		0	70.4	70	.4	.4	0	70.4	22	SEC	BOXNHL	24785	70	20.6	0	2991141	91		0	70.4	70	.4	.4	0	70.4
8	EC	BOXNHL	72455	70	20.6	0	2991141	92.4		0	71.8	70	1.8	1	.8	71	23	SEC	BOXNHL	94316	70	20.6	0	2991141	91.2		0	70.6	70	.6	.6	0	70.6
9	EC	BOXNHL	39296	70	20.6	0	2991141	87.2		0	66.6	70	0	0	0	70	24	SEC	BOXNHL	24419	70	20.6	0	2991141	85.2		0	64.6	70	0	0	0	70
10	ECO	BOXNHL	35505	70	20.6	0	2991141	90.2		0	69.6	70	0	0	0	70	25	SEC	BOXNHL	50994	70	20.6	0	2991141	84.2		0	63.6	70	0	0	0	70
11	ECO	BOXNHL	49311	70	20.6	0	2991141	91.2		0	70.6	70	.6	.6	0	70.6	26	SEC	BOXNHL	35963	70	20.6	0	2991141	92.5		0	72	70	2	1	1	71
12	ECO	BOXNHL	91426	70	20.6	0	2991141	92.2		0	71.6	70	1.6	1	.6	71	27	SEC	BOXNHL	20716	70	20.6	0	2991141	88.5		0	68	70	0	0	0	70
13	ECO	BOXNHL	71014	70	20.6	0	2991141	89		0	68.4	70	0	0	0	70	28	SEC	BOXNHL	36526	70	20.6	0	2991141	87.3		0	67.2	70	0	0	0	70
14	ECO	BOXNHL	27760	70	20.6	0	2991141	94.8		0	74.2	70	4.2	1	3.2	71	29	WR	BOXN	03349	58.8	22.48	0	2991141	88.3		0	66.12	68	0	0	0	68
15	ER	BOXNHL	10826	70	20.6	0	2991141	88.4		0	67.8	70	0	0	0	70																		

TAX Invoice Number:9920011923080879 GSTIN OF SUPPLIER: KAKOLI GHOSHAL 19AAAGM0289C1ZG FOR 19-WEST BENGAL
GSTIN OF CUSTOMER : 20AAACT0054AZZE FOR 20-JHARKHAND

STEAM COAL (RAKE DEMAND)
OLFD RMRK: OPEN WAGON LOADED AT REQUEST & RISK OF SENDER. TRAIN LOAD CONDITIONS COMPLIED WITH. LOADING DONE IN SIDING, NOT SUPERVISED BY RAILWAY STAFF. #NOTE : 142 PACKAGING CONDITION OUTER NOT COMPLIANT. P.S.#### CLUBBED WITH INVOICE NUMBERS 27 TO 29 FOR PT
JT AND BENEFIT OF TRAIN LOAD RATE GRANTED. #. DESTINATION TO ENSURE COLLECTION OF UNDER CHARGES, IF DUE, ON ACCOUNT OF NON LOADING O
F.OTHER DEMANDS / FNOTES. #1.LOAD CONDITION FULFILLED,DEFAULT POL SITUATION CODE : A,MC.COAL GRADE: G##,SALES TAX NOT APPLICABLE. #

Total जोड़: 2603.2 | 0 | 2603.92 | 2028 | 16.6 | 9.4 | 7.2 | 2037.4

Commodity Description सामान का विवरण: BANK DRAFT/BANKER'S CHEQUE 374022 30-12-19 HDFC Rs 1290540.00/-; BANK DRAFT/BANKER'S CHEQUE 111327 15-11-19 HDFC Rs 100000.00/-; BANK DRAFT/BANKER'S C HEQUE 111333 15-11-19 HDFC Rs 50000.00/-; BANK DRAFT/BANKER'S CHEQUE 111659 13-12-19 HDFC Rs 8984.00/-

Remarks टिप्पणी: 6015

Payment Mode भुगतान पद्धति:

Stationery Number स्टेशनरी क्र. सं.: A- 7316015

21.01.2020

Station Stamp स्टेशन की स्टेम्प

Sig. Station Master स्टेशन मास्टर के हस्ताक्षर

Chief Weigh Clerk

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Tata Power Co. Ltd.
Jojobera Power Plant
Jamshedpur

PENDING TRANASACTION REPORT...
PRINT DATE : 21/01/2020 PRINT TIME : 2:50:41 PM

Rake ID.	~~9914~~ 9916 ECL	Tot.Gross Wt.	5012.25	DateIn	21/01/2020
Product	1	Tot.Tare Wt	1268.05	Time In	09:00:53
Customer	1	Tot. Net Wt	3744.20	Date Out	21/01/2020
Wagon Weighed	58	Shift	B	Time Out	14:49:43

Wagon No TippleTime	Wagon ID Wagon Type	Wagon CC Mode	Date In Time In	Date Out Time Out	Gross Wt. Tare Wt.	Net Wt.
1	SEC43092	70.30	21/01/2020	21/01/2020	90.80	69.60
3	Single	AD AD	09:00:53	09:03:00	21.20	
2	SER78776	70.40	21/01/2020	21/01/2020	90.50	69.85
2	Single	AD AD	09:04:15	09:06:06	20.65	
3	NF08527	59.10	21/01/2020	21/01/2020	84.35	62.40
2	Single	AD AD	09:07:36	09:09:26	21.95	
4	CR60038	70.40	21/01/2020	21/01/2020	88.85	67.50
2	Single	AD AD	09:10:58	09:12:47	21.35	
5	NE06625	59.30	21/01/2020	21/01/2020	80.60	59.15
2	Single	AD AD	09:13:46	09:15:38	21.45	
6	WCR28860	58.40	21/01/2020	21/01/2020	80.65	59.15
2	Single	AD AD	09:25:19	09:27:10	21.50	
7	SWR16358	60.10	21/01/2020	21/01/2020	82.20	60.40
2	Single	AD AD	09:29:31	09:31:22	21.80	
8	SE30121	58.81	21/01/2020	21/01/2020	83.05	61.50
	Single	AD AD	09:32:47	09:34:38	21.55	
	NCR25700	70.50	21/01/2020	21/01/2020	85.15	64.00
2	Single	AD AD	09:35:55	09:37:45	21.15	
10	SE67664	58.30	21/01/2020	21/01/2020	83.60	61.35
2	Single	AD AD	09:51:31	09:53:39	22.25	
11	ECR65471	70.04	21/01/2020	21/01/2020	87.65	66.90
2	Single	AD AD	09:57:23	09:59:14	20.75	
12	WCR17526	58.30	21/01/2020	21/01/2020	93.60	72.45
2	Single	AD AD	10:00:59	10:02:48	21.15	
13	SE25108	58.83	21/01/2020	21/01/2020	83.05	61.40
2	Single	AD AD	10:03:48	10:05:40	21.65	
14	SR10112	58.30	21/01/2020	21/01/2020	84.55	63.40
2	Single	AD AD	10:06:29	10:08:20	21.15	
15	NF00475	59.30	21/01/2020	21/01/2020	83.00	60.80
2	Single	AD AD	10:12:57	10:14:47	22.20	
16	SECR18949	71.40	21/01/2020	21/01/2020	87.90	66.65
1	Single	AD AD	10:16:07	10:17:57	21.25	
17	SE12345	58.30	21/01/2020	21/01/2020	84.50	62.80
2	Single	AD AD	10:32:38	10:34:29	21.70	
18	WCR41610	58.83	21/01/2020	21/01/2020	85.65	63.25
2	Single	AD AD	10:36:46	10:38:40	22.40	
19	NR60388	59.27	21/01/2020	21/01/2020	83.85	62.00
2	Single	AD AD	10:40:18	10:42:10	21.85	
20	SC61306	58.30	21/01/2020	21/01/2020	83.85	61.75
2	Single	AD AD	10:44:45	10:46:36	22.10	
21	SE99033	58.86	21/01/2020	21/01/2020	87.50	64.95
2	Single	AD AD	10:47:48	10:49:50	22.55	
22	SC30330	59.10	21/01/2020	21/01/2020	83.85	61.60

1	Single	AD AD	10:51:02	10:52:53	22.25	
23	WR61233	59.18	21/01/2020	21/01/2020	86.50	64.45
7	Single	AD AD	10:54:03	11:01:56	22.05	
24	SE62734	59.89	21/01/2020	21/01/2020	88.25	64.85
2	Single	AD AD	11:04:46	11:06:40	23.40	
25	SE61561	58.83	21/01/2020	21/01/2020	87.75	65.65
2	Single	AD AD	11:07:45	11:09:40	22.10	

Wagon No TippleTime	Wagon ID Wagon Type	Wagon CC Mode	Date In Time In	Date Out Time Out	Gross Wt. Tare Wt.	Net Wt.
26	SCR59240	70.04	21/01/2020	21/01/2020	87.00	65.40
1	Single	AD AD	11:11:00	11:12:55	21.60	
27	NR60678	58.30	21/01/2020	21/01/2020	87.00	64.80
10	Single	AD AD	11:14:56	11:24:43	22.20	
28	NCR40377	68.14	21/01/2020	21/01/2020	85.40	63.05
2	Single	AD AD	11:27:25	11:29:20	22.35	
29	SE61867	58.83	21/01/2020	21/01/2020	85.65	63.25
2	Single	AD AD	11:30:19	11:32:12	22.40	
30	WR03348	59.60	21/01/2020	21/01/2020	88.00	66.30
2	Single	AD AD	11:33:24	11:35:16	21.70	
31	ECoR27768	70.90	21/01/2020	21/01/2020	93.55	72.55
2	Single	AD AD	11:39:51	11:41:44	21.00	
32	ECR12014	70.40	21/01/2020	21/01/2020	90.20	69.30
2	Single	AD AD	11:42:52	11:44:43	20.90	
33	SEC50994	70.70	21/01/2020	21/01/2020	83.65	62.80
2	Single	AD AD	11:52:31	11:54:31	20.85	
34	ER10826	70.50	21/01/2020	21/01/2020	87.20	66.60
2	Single	AD AD	11:59:12	12:01:06	20.60	
35	ECR49153	70.40	21/01/2020	21/01/2020	88.50	67.35
2	Single	AD AD	12:05:56	12:07:49	21.15	
36	ECR91426	59.92	21/01/2020	21/01/2020	91.25	69.75
2	Single	AD AD	12:09:35	12:11:32	21.50	
37	SEC45239	70.50	21/01/2020	21/01/2020	85.65	64.55
2	Single	AD AD	12:13:24	12:15:16	21.10	
38	SECR24419	70.70	21/01/2020	21/01/2020	83.50	62.40
2	Single	AD AD	12:16:50	12:18:43	21.10	
39	ECoR35505	70.00	21/01/2020	21/01/2020	88.75	67.55
2	Single	AD AD	12:20:09	12:22:01	21.20	
40	ECR71014	70.70	21/01/2020	21/01/2020	87.10	66.00
2	Single	AD AD	12:23:53	12:25:46	21.10	
41	SECR20718	70.60	21/01/2020	21/01/2020	87.25	66.90
2	Single	AD AD	12:28:26	12:30:19	20.35	
42	ECR14197	71.00	21/01/2020	21/01/2020	89.50	68.60
2	Single	AD AD	12:31:45	12:33:39	20.90	
43	ECR26562	71.08	21/01/2020	21/01/2020	88.30	67.35
2	Single	AD AD	12:40:38	12:42:30	20.95	
44	SECR22090	70.40	21/01/2020	21/01/2020	88.35	66.90
2	Single	AD AD	12:44:23	12:46:16	21.45	
45	ECR53155	70.50	21/01/2020	21/01/2020	87.20	65.80
2	Single	AD AD	12:47:27	12:49:21	21.40	
46	NER10157	70.30	21/01/2020	21/01/2020	86.95	66.25
2	Single	AD AD	12:50:21	12:52:13	20.70	
47	ECR72455	70.40	21/01/2020	21/01/2020	87.85	66.65
2	Single	AD AD	12:56:46	12:58:38	21.20	
48	ER12865	70.66	21/01/2020	21/01/2020	81.75	60.45
2	Single	AD AD	13:03:17	13:05:17	21.30	
49	SECR30528	70.90	21/01/2020	21/01/2020	84.85	63.70
2	Single	AD AD	13:07:59	13:09:54	21.15	
50	SECR84316	71.00	21/01/2020	21/01/2020	86.15	65.00
11	Single	AK AD	13:11:29	13:22:33	21.15	
51	SER67794	70.50	21/01/2020	21/01/2020	88.80	67.45
2	Single	AD AD	14:25:50	14:27:49	21.35	
52	SECR85963	70.30	21/01/2020	21/01/2020	90.70	69.20
2	Single	AD AD	14:30:23	14:32:37	21.50	
53	ECR39296	70.18	21/01/2020	21/01/2020	84.15	62.90
2	Single	AD AD	14:33:38	14:35:29	21.25	
54	NE41780					

2	[illegible]	58.0M	21/01/2020	21/01/2020	83.70	61.05
	Single	AD AD	14:36:18	14:38:14	22.65	
55	ECOR49311	70.23	21/01/2020	21/01/2020	87.00	65.10
2	Single	AD AD	14:39:23	14:41:15	21.90	
56	CR12560	70.58	21/01/2020	21/01/2020	84.10	62.60
1	Single	AD AD	14:42:04	14:43:55	21.50	
57	ECR90361	70.12	21/01/2020	21/01/2020	84.90	64.00

Wagon No TippleTime	Wagon ID Wagon Type	Wagon CC Mode	Date In Time In	Date Out Time Out	Gross Wt. Tare Wt.	Net Wt.
2	Single	AD AD	14:44:53	14:46:47	20.90	
58	SECR24785	71.04	21/01/2020	21/01/2020	87.15	65.85
2	Single	AD AD	14:47:52	14:49:43	21.30	

TIPPLING TIME IN MINUTES.
ALL WEIGHTS ARE IN TONNES

LEGEND A- Auto/Semi Mode Weighment
M- Manual Mode Weighment
D- Digitizer obtained Weight
K- Keyboard Entered Weight

Wagon Tippler ver 1.3
Supplied by Avery India Limited
Leading the weigh in Technology

ANNEXURE R3

Computation of Transit Loss for a Sample Rake

Rake	RR Wt (MT)	JPP Wt (MT)	Shortage	Transit Loss
RR No. 41200612	1867.60	3744.20		
RR No. 41200613	2003.92			
Total	3871.52	3744.20	127.32	6.82%

ANNEXURE R4

UNIT II	UoM	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	2019-20
GEN GROSS	MUs	59.88	77.78	64.91	61.59	60.50	58.57	61.41	63.04	58.53	64.17	56.77	56.05	743.2
TOTAL COAL CONS	MT	37935	51080	42448	40256	41276	46675	45852	39613	31902	35991	33025	35892	481945
LDO CONS	KL	177	15.0	17.0	6.0	5.0	0.0	45.1	1.0	7.00	0.0	3.00	3.00	279
WEIGHTED AVG Coal GCV	KCal/kg	3997	3847	3884	3893	3728	3186	3391	4046	4677	4541	4379	3984	3918.08
TOTAL HEAT INPUT COAL	MCal	151617645	196520015	164859605	156697908	153870532	148719254	155494909	160269780	149192624	163436775	144620745	143002117	1888301909
HEAT INPUT LDO	MCal	1610700	136500	154700	54600	45500	0	410774	9100	63700	0	27300	27300	54600
G TOTAL HEAT INPUT	MCal	153228345	196656515	165014305	156752508	153916032	148719254	155905683	160278880	149256324	163436775	144648045	143029417	1890842083
HEAT RATE	Kcal/kWh	2559	2528	2542.15	2545	2544	2539	2539	2542	2550	2547	2548	2552	2544

UNIT III	UoM	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	2019-20
GEN GROSS	MUs	63.76	81.49	68.93	67.03	62.29	58.78	58.99	65.41	56.60	47.99	49.46	40.55	721.3
TOTAL COAL CONS	MT	40683	53405	43987	43952	42216	46707	45395	41624	31879	26686	28586	26287	471408
LDO CONS	KL	54	9.0	18.0	11.4	3.0	5.0	12.0	5.4	0.88	3.7	55.00	3.00	180
WEIGHTED AVG Coal GCV	KCal/kg	3978	3860	3980	3878	3754	3197	3303	3999	4539	4595	4406	3949	3892.13
TOTAL HEAT INPUT COAL	MCal	161853079	206162177	175086905	170428623	158466741	149332140	149937608	166450031	144696015	122616856	125958635	103795035	1834783845
HEAT INPUT LDO	MCal	491400	81900	163800	103740	27300	45500	109200	49194.6	8044.4	33670	500500	27300	561470
G TOTAL HEAT INPUT	MCal	162344479	206244077	175250705	170532363	158494041	149377640	150046808	166499225	144704060	122650526	126459135	103822335	1836425394
HEAT RATE	Kcal/kWh	2546	2531	2542.57	2544	2544	2541	2544	2545	2556	2556	2557	2560	2546

List of Asset Decapitalized alongwith depreciated value(%)

ANNEXURE R5

					Mid of Cap yea	30-09-2010	30-09-2019	30-09-2025						
Scheme/item Name	Org Val	70% of Org Val	Max Dep Val	Date of cap of Asset	Mid of Cap year	No. of days in Service			Dep rate (PPA Period)	Dep rate (Reg Regime)	Dep Claimed till date of Decap		Cum Dep	Depreciated val (%)
	FY 20					FY 11	FY 20	FY 26			FY 11	FY 20	Total	
536800 (UPS battery Banks)	10.00	7.00	9.00	01-04-2000	01-04-2000	3835	7122	9314	33.40%	5.28%	9.00		9.00	10.00%
Swithcgear Equipments	223.76	156.63	201.38	01-02-2001	30-09-2000	3653	6940	9132	7.84%	5.28%	175.57	15.49	191.06	14.62%
Tata sumo SA+series,JH-05-F6734	4.62	3.23	4.16	23-12-2003	30-09-2002	2923	6210	8402	33.40%	9.50%	4.16		4.16	10.00%
Tata sumo SA+series-AC	4.35	3.04	3.91	31-03-2004	30-09-2003	2558	5845	8037	33.40%	9.50%	3.91		3.91	10.00%
Burner Panel Bends	32.33	22.63	29.10	01-02-2001	30-09-2000	3653	6940	9132	7.84%	5.28%	25.37	2.24	27.60	14.62%
2X 60 KVA UPS	13.35	9.34	12.01	01-02-2001	30-09-2000	3653	6940	9132	33.40%	5.28%	12.01	0.00	12.01	10.00%
Up gradation of Unit 2 Turbine Super Visory System	43.17	30.22	38.85	01-02-2001	30-09-2000	3653	6940	9132	7.84%	5.28%	33.87	2.99	36.86	14.62%
Up Gradation of Furnace Safeguard & Supervisory System and	180.91	126.64	162.82	01-02-2002	30-09-2001	3288	6575	8767	7.84%	5.28%	127.77	19.72	147.48	18.48%
Replacement of Dead Tank CT with Live Tank CT	10.40	7.28	9.36	01-02-2002	30-09-2001	3288	6575	8767	7.84%	5.28%	7.34	1.13	8.48	18.48%
Laptop Toshiba 4GB intelli5 500GB 158006360	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006359	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006349	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006344	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006334	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006333	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006332	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006331	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006330	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006329	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006328	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006327	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006326	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006325	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006324	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006323	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006320	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006319	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006317	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006316	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006312	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006311	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006310	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006309	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006306	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
DELL LATTUDE 3490 LAPTOP L4443 158011327	0.57	0.401	0.52	24-11-2018	30-09-2018	0	366	2558	33.40%	15.00%	0.00	0.086	0.09	84.96%
Laptop Toshiba 4GB intelli5 500GB 158006407	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006406	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006405	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006404	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006400	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006399	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006396	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006395	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006391	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006390	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006388	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006382	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006381	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006378	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006377	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006376	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006372	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006368	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006367	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006366	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006364	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006362	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006361	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006239	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006237	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006234	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006233	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006232	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006225	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006224	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006222	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006221	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006220	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006218	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006217	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006215	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006210	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006209	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006208	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006207	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006204	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006203	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006202	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006201	0.45	0.316	0.41	17-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
JPP/Laptop/12-13/22 & 23 158006191	0.47	0.327	0.42	31-03-2014	30-09-2013	0	2192	4384	33.40%	15.00%	0.00	0.344	0.34	26.35%
JPP/Laptop/12-13/28 158006184	0.47	0.327	0.42	31-03-2014	30-09-2013	0	2192	4384	33.40%	15.00%	0.00	0.344	0.34	26.35%
JPP/Laptop/12-13/02 158006169	0.37	0.256	0.33	31-03-2014	30-09-2013	0	2192	4384	33.40%	15.00%	0.00	0.269	0.27	26.35%
Laptop Toshiba 4GB intelli5 500GB 158006305	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006304	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB-L2855 158006303	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006300	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006299	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006297	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006295	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006294	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006278	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006257	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006256	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006254	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006251	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006248	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006247	0.45	0.316	0.41	26-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006246	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006243	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006242	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006241	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%
Laptop Toshiba 4GB intelli5 500GB 158006240	0.45	0.316	0.41	31-03-2015	30-09-2014	0	1827	4019	33.40%	15.00%	0.00	0.321	0.32	28.93%

Total IT Equipments	42.06												29.60	29.62%

INDIAN INCOME TAX RETURN ACKNOWLEDGEMENT

[Where the data of the Return of Income in Form ITR-1 (SAHAJ), ITR-2, ITR-3, ITR-4(SUGAM), ITR-5, ITR-6, ITR-7 filed and verified]

(Please see Rule 12 of the Income-tax Rules, 1962)

Assessment Year 2020-21

PAN	AAACT0054A		
Name	THE TATA POWER CO LTD		
Address	BLOCK B, 5TH FLOOR, , 34 SANT TUKARAM ROAD, Mumbai, MUMBAI, MAHARASHTRA, 400009		
Status	Plc Company	**Form Number**	ITR-6
Filed u/s	139(1)-On or before due date	**e-Filing Acknowledgement Number**	248981661100221

Taxable Income and Tax details	**Current Year business loss, if any**	1	4827502202
	Total Income		0
	Book Profit under MAT, where applicable	2	333812109
	Adjusted Total Income under AMT, where applicable	3	0
	Net tax payable	4	58323651
	Interest and Fee Payable	5	0
	Total tax, interest and Fee payable	6	58323651
	Taxes Paid	7	753824982
	(+)Tax Payable /(-)Refundable (6-7)	8	-695501330
Dividend Distribution Tax details	**Dividend Tax Payable**	9	0
	Interest Payable	10	0
	Total Dividend tax and interest payable	11	0
	Taxes Paid	12	0
	(+)Tax Payable /(-)Refundable (11-12)	13	0
Accreted Income & Tax Detail	**Accreted Income as per section 115TD**	14	0
	Additional Tax payable u/s 115TD	15	0
	Interest payable u/s 115TE	16	0
	Additional Tax and interest payable	17	0
	Tax and interest paid	18	0
	(+)Tax Payable /(-)Refundable (17-18)	19	0

Income Tax Return submitted electronically on **10-02-2021 16:12:42** from IP address **103.115.97.2** and verified by

PRAVEER SINHA

having PAN **ALJPS8886J** on **10-02-2021 16:12:42** from IP address **103.115.97.2** using

Digital Signature Certificate (DSC).

DSC details: **122558082475871CN=Verasys CA 2014,2.5.4.51=#13294f6666696365204e6f2e2032312c20326e6420466c6f6f722c20426861766e61204275696c64696e67,STREET=V.S.**

DO NOT SEND THIS ACKNOWLEDGEMENT TO CPC, BENGALURU

ANNEXURE R7

DETAILS OF ADMINISTRATIVE AND GENERAL EXPENSES FOR FY 2019-20

(Rs. In Lakh)

Sl. No.	ITEM	2019-20 (U2)	2019-20 (U3)	
1	2	3	4	5
	Breakup of A&G Expenses :			
1	Insurance	113.80	91.17	Expenses towards Stock and Asset Insurance
2	Security	54.08	54.08	Expenses towards Security Manpower
	Administrative Expenses :			
3	- Rent	7.55	7.55	Rent for Quarters
4	Traveling and conveyance	23.36	23.20	Expenses towards Vehicle Hire Charges, Official Travelling Expenses etc.
5	Communication expenses	4.63	4.63	Expenses towards Landline, Internet and Broandband
6	Advertising	22.68	21.89	
7	Miscellaneous Expenses	5.53	6.21	Other miscellaneous Head
	Sub-Total (Administrative Expenses)	**63.74**	**63.46**	
8	Other General Expenses	396.65	425.90	Expenses towards Auditor Remuneration, Consultant Expenses, Local doctors Fees, Pathological Test, Pantry, Courier, Rates and Taxes, Rent of Local Guest House, Printing,Provision, Stationery,Training, GST Audit Fees and other certification charges, R&R Gift etc .
	Total A&G Expenses	628.27	634.61	
Notes: In addition to above, Head office Expenses, Water charges and Ash Disposal Expeses are claimed separately as per extant Regulations and approach followed in previous Order.				

S. No	Particulars	Purpose of Capital Spares
1	Turbine and Generator Bearing Sets	In total there are 5 bearings in each Turbine - Generator assembly. The basic purpose of such bearings at the end of module (HP-IP, LP & Generator Module) is to support shaft during rotation and prevent vibration in the system. These turbine bearings are critical in nature and have high lead time to manufacture and deliver. It is submitted that available spare bearing was consumed in Unit 3 in the last control period to attend the damaged bearing. The damaged bearing was sent to M/s S.V. Turbo Engineering Works (P) Ltd. for repairing/re-babitting, however, as observed by the vendor the bearings were no more usable as the bearing outer shell spherical surface is not repairable and also the parent material of bearing shell is deformed. Accordingly, the Petitioner proposed for a spare bearing to mitigate any failure which could have caused shutdown of Units affecting power supply. Accordingly, cost incurred towards part of the supply in 2019-20 has been claimed in true-up of 2019-20.
2	Coal Mill Gear Box	Coal Mill grinds the coal into fine powder which is continuously fed in the boiler for continuous use. The drive of the motor is transferred to coal mill by means of gear box. The gear box is critical in nature and have high lead time of procurement. Unavailability of any coal mill for longer period can cause lower generation hampering overall expected power supply from these Units. Due to vintage and various factors like coal dust ingression through the gear box oil seal, generation of metallic chips due to erosion of gear teeth, the gearbox is prone to failure/breakdown. Moreover, in monsoon season, rate of Coal mill feed pipe blockade is high and, therefore, frequent changeover of coal mill is required to clear the blockage. Hence, together these failures pose serious risk to unit availability. In view of above, a spare gear box was proposed to be procured to attend any emergency situation since dismantling coupled with entire repair and restoration of Coal Mill Gear Box is a time-consuming process. Accordingly, cost incurred towards part of the supply in 2019-20 has been claimed in true-up of 2019-20.
3	Turbine Stop & Control Valve Actuator	The steam generated in boiler is transferred to Turbine by means of Main-steam line. At the inlet of turbine there is Stop valve and Control valves to regulate the steam ingress into the turbine as per load demand. Stop valve is a full open and full close type whereas Control valve is partial open and partial close type (its opening and closing depends upon load demand, with less load demand it opens less and with high load demand it opens more). Stop valve and Control valve work together. At first Stop valve opens and then subjected to load demand Control valve opens. With the ingress of steam inside the turbine leads to rotation of

		turbine rotor to rated RPM. These valves are very essential for safe operation of the Units. These valves are capital spares and are having high lead time of procurement. These valves are in service since inception. Because of continuous operation, condition of the valves has deteriorated and they have outlived useful life, therefore, it was high time to have a set of spare to restore the Units in any exigency. Accordingly, cost incurred towards part of the supply in 2019-20 has been claimed in true-up of 2019-20.
4.	Procurement of Critical Spares for Turbine and DCS Cards	Control System of the Plant is very essential for the real time monitoring and operation of the Units. Such tasks are performed through various processors/cards. These cards are capital in nature and have high lead time of procurement since most of them are supplied from abroad. Following spares have been procured under this head in FY 2019-20 and cost incurred towards such supply have been claimed in true-up of 2019-20.

TATA

JPP/CHP/341/2019
09th September' 2019

To
The General Manager (M & S),
Central Coalfields Limited
Darbhanga House, Ranchi
Jharkhand.

Reg: Submission of Amended PPA of specified end use plant (Unit 2 & Unit 3) and Order approved by Jharkhand State Regulatory Commission dated-06th September'2019.

Dear Sir,

We are submitting following self-certified documents for signing of Fuel Supply Agreement (FSA) against second round of Auction under para B(ii) of SHAKTI Policy.

a. Copy of Amended Power Purchase Agreement (PPA) dated 07th September'19.
b. Copy of Order approved by appropriate Commission (Jharkhand State Regulatory Commission, Ranchi) as per paragraph B(ii) of the Policy.

Please acknowledge the receipt and request to expedite signing of FSA.

Thanking You
Yours Faithfully

For The Tata Power Co Ltd

(Durgesh Sharma) 9/9/19
Group Head – CHP

OFFICE OF THE GM (S&M), CCL • RANCHI • 5177 10/9/19

TATA

EASTERN COALFIELDS LTD.
Office of the General Manager/HOD
Received Not Verified
10 SEP 2019
No.
13, R. N. Mukherjee Road
Kolkata-700001

JPP/CHP/142/2019
09th September' 2019

To
The GM (S & M)
Eastern Coalfields Limited
13, R.N. Mukherjee Road,
Kolkata, PIN-700001

Reg: Submission of Amended PPA of specified end use plant (Unit 2 & Unit 3) and Order approved by Jharkhand State Regulatory Commission dated-06th September'2019.

Dear Sir,

We are submitting following self-certified documents for signing of Fuel Supply Agreement (FSA) against second round of Auction under para B(ii) of SHAKTI Policy.

a. Copy of Amended Power Purchase Agreement (PPA) dated 07th September'19.
b. Copy of Order approved by appropriate Commission (Jharkhand State Regulatory Commission, Ranchi) as per paragraph B(ii) of the Policy.

Please acknowledge the receipt and request to expedite signing of FSA.

Thanking You
Yours Faithfully

For The Tata Power Co Ltd

The Tata Power Co. Ltd. Jamshedpur-16

(Durgesh Sharma)
Group Head – CHP
9/9/19

TATA POWER
The Tata Power Company Limited
Jojobera Power Plant, Jamshedpur - 831016
Tel 91 657 2276879, 6511543
Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001

JPP/CHP/140/2019
09th September' 2019

To
The General Manager (M & S),
Mahanadi Coalfields Limited
PO: Jagriti Vihar, Sambalpur,
Odisha, PIN - 768020

Reg: Submission of Amended PPA of specified end use plant (Unit 2 & Unit 3) and Order approved by Jharkhand State Regulatory Commission dated-06th September'2019.

Dear Sir,

We are submitting following self-certified documents for signing of Fuel Supply Agreement (FSA) against second round of Auction under para B(ii) of SHAKTI Policy.

a. Copy of Amended Power Purchase Agreement (PPA) dated 07th September'19.
b. Copy of Order approved by appropriate Commission (Jharkhand State Regulatory Commission, Ranchi) as per paragraph B(ii) of the Policy.

Please acknowledge the receipt and request to expedite signing of FSA.

Thanking You
Yours Faithfully

For The Tata Power Co Ltd

The Tata Power Co. Ltd. Jamshedpur-16

(Durgesh Sharma) 9/9/19
Group Head – CHP

Date: September 14, 2019

COAL INDIA LIMITED

Corrigendum 5 to Scheme Document for the Second Round of Auction of Coal Linkages for IPPs having already Concluded Long Term PPAs dated March 18, 2019 ("Scheme Document")

The following amendments and insertions are applicable to the Scheme Document.

Sl. No. 1	Reference to Scheme Document: 3.6.8: Submissions by Provisional Successful Bidder(s)

As appearing in the original Scheme Document

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **60 (sixty)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

To be read as

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **105 (hundred and five)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

Date: October 25, 2019

COAL INDIA LIMITED

Corrigendum 6 to Scheme Document for the Second Round of Auction of Coal Linkages for IPPs having already Concluded Long Term PPAs dated March 18, 2019 ("Scheme Document")

The following amendments and insertions are applicable to the Scheme Document.

Sl. No. 1	Reference to Scheme Document: 3.6.8: Submissions by Provisional Successful Bidder(s)

As appearing in the original Scheme Document

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **60 (sixty)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

To be read as

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **150 (hundred fifty)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

Date: December 18, 2019

COAL INDIA LIMITED

Corrigendum 7 to Scheme Document for the Second Round of Auction of Coal Linkages for IPPs having already Concluded Long Term PPAs dated March 18, 2019 ("Scheme Document")

The following amendments and insertions are applicable to the Scheme Document.

Sl. No. 1	Reference to Scheme Document: 3.6.8: Submissions by Provisional Successful Bidder(s)

As appearing in the original Scheme Document

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **60 (sixty)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

To be read as

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **195 (one hundred and ninety five)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

Date: February 10, 2020

COAL INDIA LIMITED

Corrigendum 8 to Scheme Document for the Second Round of Auction of Coal Linkages for IPPs having already Concluded Long Term PPAs dated March 18, 2019 ("Scheme Document")

The following amendments and insertions are applicable to the Scheme Document.

Sl. No. 1	Reference to Scheme Document: 3.6.8: Submissions by Provisional Successful Bidder(s)

As appearing in the original Scheme Document

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **60 (sixty)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

To be read as

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **240 (two hundred and forty)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

Date: April 23, 2020

COAL INDIA LIMITED

Corrigendum 9 to Scheme Document for the Second Round of Auction of Coal Linkages for IPPs having already Concluded Long Term PPAs dated March 18, 2019 ("Scheme Document")

The following amendments and insertions are applicable to the Scheme Document.

Sl. No. 1	Reference to Scheme Document: 3.6.8: Submissions by Provisional Successful Bidder(s)

As appearing in the original Scheme Document

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **60 (sixty)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

To be read as

3.6.8 **Submissions by Provisional Successful Bidder(s)**

Each Provisional Successful Bidder will be required to submit the following documents and information, within **300 (three hundred)** days of issuance of LOI to such Provisional Successful Bidder or such additional time period as may be prescribed by CIL at its sole and absolute discretion:

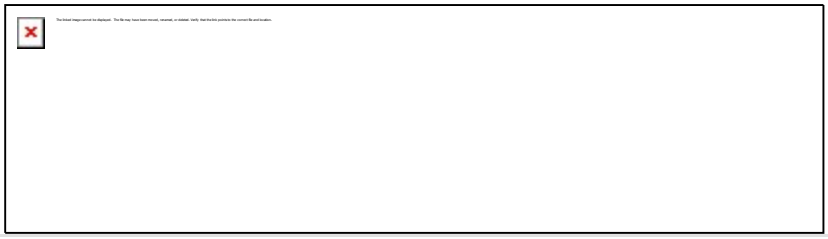
3.6.8.1 Submission of copy of each Amended PPA, along with the approval letter from the appropriate commission; and

3.6.8.2 Submission of the documents specified in **Annexure X**, as applicable, to the relevant Subsidiary

Kumar Dilip

From: Tiwari Vikas
Sent: 05 May 2020 18:13
To: Kumar Dilip
Subject: FW: Documents for signing Tripartite Agreement

Regards,
Vikas Tiwari
Lead Engineer - CHP
The Tata Power Company Limited, Jojobera Power Plant, Jamshedpur 831 016 Jharkhand, India
Mobile: 9204853156



From: Sunil Barad <sunil.barad@qcin.org>
Sent: Monday, March 16, 2020 10:49 AM
To: Tiwari Vikas <vikast@tatapower.com>
Subject: Fwd: Documents for signing Tripartite Agreement

[EXTERNAL sender, Exercise caution..!]

From: Sunil Barad
Sent: Monday, March 16, 2020 10:47:13 AM
To: vikast@tatwpower.com <vikast@tatwpower.com>; jojo-clg@tatapower.com <jojo-clg@tatapower.com>
Cc: Siddharth Banerjee <siddharthbanerjee@qcin.org>; Varun Singh <varun.singh@qcin.org>; Abhishek Kumar Singh <abhishek.kumar@qcin.org>
Subject: Documents for signing Tripartite Agreement

Dear Sir,

Trust you are doing well !

This is for your kind information that that please share the soft copies of the following documents so that we can check and keep draft ready before signing i.e 17th march 2020.

1. Board resolution of Authorised signatory duly certified by Nominated Director and attested by CS.
2. Copy of all FSAs soft copy(For Linkage customers)/ Copy of sale intimation letter provided by MSTC/Metal Junction duly notarised.

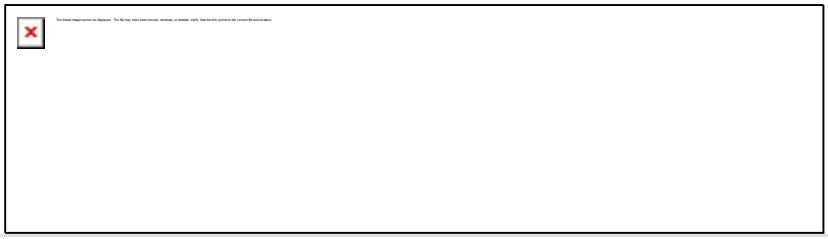
3. Copy of Bidder Id card duly notarised.

Regards,
Sunil Barad
Quality Council of India
+91-9776473282/7978596760

Kumar Dilip

From: Tiwari Vikas
Sent: 05 May 2020 18:08
To: Kumar Dilip
Subject: FW: Regarding signing of tripartite agreement

Regards,
Vikas Tiwari
Lead Engineer - CHP
The Tata Power Company Limited, Jojobera Power Plant, Jamshedpur 831 016 Jharkhand, India
Mobile: 9204853156



From: GM Quality <gmqmccl2@gmail.com>
Sent: Wednesday, February 26, 2020 4:56 PM
To: Ashutosh Singh <ashutosh.singh@qcin.org>
Cc: Tiwari Vikas <vikast@tatapower.com>; Abhishek Mazumdar <abhishek.m@qcin.org>; Nakul Gupta <nakul@qcin.org>; Kuwar Ashish <kuwar.ashish@qcin.org>; Shubham Saxena <shubham.saxena@qcin.org>; Shivam Saxena <shivamsaxena@qcin.org>; Utkarsh Pandey <utkarsh.pandey@qcin.org>; Abhijeet Rai <abhijeet@qcin.org>; QCI Coal <qci.coal@qcin.org>
Subject: Re: Regarding signing of tripartite agreement

[EXTERNAL sender, Exercise caution..!]

Thanks for the mail.

On Wed, Feb 26, 2020 at 4:04 PM Ashutosh Singh <ashutosh.singh@qcin.org> wrote:

> Dear Sir,
>
> This is regarding "Third Party Sampling, Testing and Analysis of Coal to consumers of Power Sector (Including IPP's) taking Coal under Shakti Scheme/Special Forward Auction and/or any e-auction scheme(s) and Non-Power Sectors (Including CPP's) taking Coal under FSA and/ or any linkage auction / e- auction scheme(s). " by Quality Council of India (QCI).
>
> As per the mutual discussion, the meeting for signing of Tripartite Agreement in CCL is scheduled on 28th February, 2020 (Friday) at GM(QM) CCL-office, Ranchi at 11:00 AM for The Tata Power Company Limited.
>
> In case of any query or clarification kindly contact the undersigned.

Warm Regards,

Ashutosh Singh

Project Planning & Implementation Division

Quality Council of India

+919540455000

Quality Council of India
Creating an Ecosystem for Quality

Ref: JPP/CHP/70/2020

Date: 23/03/2020

To,
The General Manager (M & S),
Central Coalfields Limited,
Darbhanga House, Kutchery Road,
Ranchi-834029, Jharkhand

Subject : **Restriction for Coal Rake loading to Tata Power, PTJT Siding**

Dear Sir,

With reference to the "State lockdown notice issued by Government of Jharkhand, on 22nd March'20", we would like to inform you that all the industries in the state (other then essential services) are being shut down, this shut down has consequently decreased the power requuirement of the state.

Further to this, we have reduced our manpower to minimum essential requirement to maintain the system, as per the precautionary measure suggested by our Hon'ble Prime Minister of India, Shri Narendra Modi, regarding current scenario of COVID-19 in our country.

In view of above, we request you to kindly stop the loading of coal rake for Tata Power's, PTJT siding with immediate effect for next 20 days, so that we can honor the suggestion of our Hon'ble Prime Minister of India, regarding running of essential services with minimum essential manpower

We are very hopeful, that you will consider our request and stop the coal loading for Tata Power's PTJT Siding for next 20 days.

Thanking you,
For The Tata Power Company Ltd.

Aditya Verma

TATA POWER COMPANY LTD. JAMSHEDPUR JOJOBERA

Aditya Verma
(Group Head-Coal Logistics&Operations)

Encl : Notice by Gov of Jharkhand for State lockdown, Dated- 22nd March 2020

TATA POWER
The Tata Power Company Limited
Jojobera Power Plant, Jamshedpur - 831016
Tel 91 657 2276879, 6511543
Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001

Ref: JPP/CHP/72/2020

Date: 23/03/2020

To,
The General Manager (M & S),
Eastern Coalfields Ltd,
Sanctoria, Dishergarh – 713333
Burdwan (W.B)

Subject : **Restriction for Coal Rake loading to Tata Power, PTJT Siding**

Dear Sir,

With reference to the "State lockdown notice issued by Government of Jharkhand, on 22nd March'20", we would like to inform you that all the industries in the state (other then essential services) are being shut down, this shut down has consequently decreased the power requuirement of the state.

Further to this, we have reduced our manpower to minimum essential requirement to maintain the system, as per the precautionary measure suggested by our Hon'ble Prime Minister of India, Shri Narendra Modi, regarding current scenario of COVID-19 in our country.

In view of above, we request you to kindly stop the loading of coal rake for Tata Power's, PTJT siding with immediate effect for next 20 days, so that we can honor the suggestion of our Hon'ble Prime Minister of India, regarding running of essential services with minimum essential manpower

We are very hopeful, that you will consider our request and stop the coal loading for Tata Power's PTJT Siding for next 20 days.

Thanking you,
For The Tata Power Company Ltd.

Aditya Verma

TATA POWER COMPANY LTD. JAMSHEDPUR JOJOBERA

Aditya Verma
(Group Head-Coal Logistics&Operations)

Encl : Notice by Gov of Jharkhand for State lockdown, Dated- 22nd March 2020

TATA POWER
The Tata Power Company Limited
Jojobera Power Plant, Jamshedpur - 831016
Tel 91 657 2276879, 6511543
Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001

Ref: JPP/CHP/71/2020

Date: 23/03/2020

To,
The General Manager (M & S),
Mahanadi Coalfields Limited,
Jagriti Vihar, Sambalpur
Orissa-768020

Subject : **Restriction for Coal Rake loading to Tata Power, PTJT Siding**

Dear Sir,

With reference to the "State lockdown notice issued by Government of Jharkhand, on 22nd March'20", we would like to inform you that all the industries in the state (other then essential services) are being shut down, this shut down has consequently decreased the power requuirement of the state.

Further to this, we have reduced our manpower to minimum essential requirement to maintain the system, as per the precautionary measure suggested by our Hon'ble Prime Minister of India, Shri Narendra Modi, regarding current scenario of COVID-19 in our country.

In view of above, we request you to kindly stop the loading of coal rake for Tata Power's, PTJT siding with immediate effect for next 20 days, so that we can honor the suggestion of our Hon'ble Prime Minister of India, regarding running of essential services with minimum essential manpower

We are very hopeful, that you will consider our request and stop the coal loading for Tata Power's PTJT Siding for next 20 days.

Thanking you,
For The Tata Power Company Ltd.

Aditya Verma

TATA POWER COMPANY LTD. JAMSHEDPUR JOJOBERA

Aditya Verma
(Group Head-Coal Logistics&Operations)

Encl : Notice by Gov of Jharkhand for State lockdown, Dated- 22nd March 2020

ANNEXURE R14

Ref: JPP/CHP/03/2020

Date: 15/04/2020

To,
The General Manager (M&S)
Mahanadi Coalfields Limited
Jagruti Vihar, Burla, Sambalpur-768020

Subject : Restriction for Coal Rake Loading for Tata Power, PTJT Siding (72203590)

Dear Sir,

With reference to the extension of "Nation lockdown period till 3rd May' 20", we would like to inform you that, we are facing huge difficulties in plant operation due to manpower crisis. Workers are not coming to plant in fear of COVID-19 Pandemic.

In view of above, we regret to inform you that, we are not in position to unload any coal rakes due to manpower crisis.

We are very hopeful, that you will understand our situation and stop the coal rake Loading in account of Tata Power's PTJT Siding till Lockdown period continues.

Thanking you,
Yours Sincerely,

For The Tata power Company Limited

Aditya Verma

TATA POWER COMPANY LTD. JAMSHEDPUR JOJOBERA

Aditya Verma

Group Head-Coal Logistics & Operations

Cc:

1) Sr. DOM, SER -CKP
2) Sr. DCM, SER -CKP
3) ARM — Tatanagar

Ref: JPP/CHP/17/2020

Date: 14/05/2020

To,
The General Manager (M & S),
Eastern Coalfields Ltd,
Sanctoria, Dishergarh – 713333
Burdwan (W.B)

Subject : Deferment of April'20 & May'20 Quota of Coal Rake loading on account of Tata Power , PTJT

Dear Sir,

With reference to the "State lockdown notice issued by Government of Jharkhand, on 22nd March'20", we would like to inform you that all the industries in the state (other than essential services) have been shut down, consequently the power requirement of the state has decreased drastically. Further to this, due to COVOD-19 pandemic, we are not having manpower for coal rake unloading.

Further to this, we have reduced our manpower to minimum essential requirement to maintain the system, as per the precautionary measure suggested by our Hon'ble Prime Minister of India, Shri Narendra Modi, regarding current scenario of COVID-19 in our country.

We would also like to inform you that our customer has indicated us, that due to COVID-19 Pandemic, the power demand is going to be the same as of now, till May'20 end. Due to such low PFL, we have to force shutdown our units.

Requesting you to kindly consider this COVID-19 Pandemic as a Force majeure and extend help to us by deferring April'20 and May'20 Quota to FY'21 months ahead.

You are hereby requested to kindly do the needful and oblige

Thanking you,
For The Tata Power Company Ltd.

Aditya Verma

Aditya Verma
(Group Head-Coal Logistics&Operations)

TATA POWER
The Tata Power Company Limited
Jojobera Power Plant, Jamshedpur - 831016
Tel 91 657 2276879, 6511543
Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001

Ref: JPP/CHP/16/2020

Date: 14/05/2020

To,
The General Manager (M & S),
Mahanadi Coalfields Limited,
Jagriti Vihar, Sambalpur
Orissa-768020

Subject : Deferment of April'20 & May'20 Quota of Coal Rake loading on account of Tata Power , PTJT

Dear Sir,

With reference to the "State lockdown notice issued by Government of Jharkhand, on 22nd March'20", we would like to inform you that all the industries in the state (other than essential services) have been shut down, consequently the power requirement of the state has decreased drastically. Further to this, due to COVOD-19 pandemic, we are not having manpower for coal rake unloading.

Further to this, we have reduced our manpower to minimum essential requirement to maintain the system, as per the precautionary measure suggested by our Hon'ble Prime Minister of India, Shri Narendra Modi, regarding current scenario of COVID-19 in our country.

We would also like to inform you that our customer has indicated us, that due to COVID-19 Pandemic, the power demand is going to be the same as of now, till May'20 end. Due to such low PFL, we have to force shutdown our units.

Requesting you to kindly consider this COVID-19 Pandemic as a Force majeure and extend help to us by deferring April'20 and May'20 Quota to FY'21 months ahead.

You are hereby requested to kindly do the needful and oblige

Thanking you,
For The Tata Power Company Ltd.

TATA POWER COMPANY LTD. JOJOBERA JAMSHEDPUR

Aditya Verma
(Group Head-Coal Logistics&Operations)

TATA POWER
The Tata Power Company Limited
Jojobera Power Plant, Jamshedpur - 831016
Tel 91 657 2276879, 6511543
Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001

Note for Approval

Based on inputs received from Jojobera Power Plant (JPP), official records and as per requirements of JSERC (Terms and Conditions for Determination of Tariff) Regulations, 2015/2020, the following is placed for approval regarding Units 2 & 3 of JPP and further submission to Hon'ble JSERC:

1. True-up Petition for 2019-20 based on actual operational performance and audited accounts for 2019-20
2. Annual Performance Review (APR) Petition for 2020-21 based on latest available actual operational and financial data for current year and projections for balance period
3. Business Plan for 2021-22 to 2025-26 covering following aspects:
    a. Capital Investment Plan – Out of total projected estimate of capital expenditure of Rs. 26.47 Crore (total for standalone schemes for Units 2 &3 and common schemes for Units 1 to 5), Rs. 19.61 Crore is allocated to Units 2 & 3
    b. Operational Plan – Covering projected Availability and PLF with SHR and Auxiliary Consumption as per norms
    c. Human Resource Plan – No increase or reduction in present manpower is proposed
    d. Since estimation of projected Non-tariff Income is difficult being irregular in nature, it is presently being proposed is Nil subject to true-up later
    e. Income from Other Businesses utilising assets/manpower of Units 2 & 3 is also being proposed as Nil subject to true-up later
4. MYT Petition for 2021-22 to 2015-26 is based on the projections proposed in the Business Plan
5. Renovation & Modernisation (R&M) Plan is being proposed to be given after carrying out RLA during next annual outages of the Units.
6. Tariff Petition for FGD is required to be filed after completion of the Project and, hence, necessary request for the same is being done

It is also proposed to fund all the Capital Investments through internal accruals only as has been done in the past. Further, since the projections are present estimates and Tariff Regulations 2020 have brought in certain substantial changes, there may be necessity for some modifications in the above proposals before Hon'ble JSERC on need basis which is proposed to be approved.

May kindly grant approval to all the above proposals.

25.11.2020

Noida

(Pankaj Prakash)

Head – Regulatory (ER)

Through

Chief – Regulatory

Chief – Regulatory, Legal and Advocacy

Chief – Generation, The Tata Power Company Limited

ANNEXURE R16

Confidential

From : **Assistant Director,**
Subsidiary Intelligence Bureau, (MHA),
Government of India,
29, Pipeline Road, Sakchi,
Jamshedpur

To : **CEO IEL & Chief,**
Jamshedpur Operation,
Tata Power Plant,
Jojobera, Jamshedpur.

No. I/TATA//2021(IS) - 409. Dated- 10.02.2021

Observation : Security set up at Power Plant Jojobera

During our visit and interaction with security officers and other officials of the Tata Power Company Limited, Jojobera, Jamshedpur, it was found that the security of the Tata Power plant needs to be strengthened to thwart any attempt by anti – national elements to sabotage the plant.

Tata Power Company Limited is a power plant of Tata Group. Its registered office is located at Bombay House, Homi Mody Street, Mumbai (Maharashtra).

The Tata Power Company Limited has its unit / branch at Jamshedpur , Jharkhand and it is known as Jojobera Power Plant, Jojobera, P.S - Govindpur, Jamshedpur. It is a vital installation as it supplies power to Tata Steel, Jamshedpur, which is one of the leading producers of steel in India.

The vulnerability of the plant from security angle is strong as several anti–national outfits are active in East Singhbhum district. There is a presence of CPI (Maoist) in the surrounding areas of Jamshedpur. The Maoists have carried out many violent incidents on several occasions in the past. In the past, many terrorists and sympathizers of AQIS were arrested at Jamshedpur. As such, possibility of threat to the Tata Power plant at Jojobera cannot be ruled – out.

It is a coal – based Thermal generating station, with an installed capacity of 547.5 MW Jojobera Power Plant of the Tata Power Company Ltd. is headed by Jagmit Singh Sidhu, CEO – IEL & Chief – Jamshedpur Operations. In a general working day, there are about 1300 manpower working inside the Jojobera Power Plant, which is spread over an area of 163 acres. During Plant Annual Outages, the manpower number goes up to the level up of the level of 1700. Its security is manned by a private security agency Turrent Industrial Security (TIS).

During our visit and interaction with security officers and other officials of the Tata Power, Jojobera, Jamshedpur , it was found that the security of the plant needs to be strengthened.

Perimeter Security: Needs Raising of perimeter wall and installation of Concertina coil on its top.

The Tata Power Plant is located at Jojobera area of Jamshedpur. Along the perimeter wall of the Tata Power plant, there are two densely populated localities Bhola Begen and Vivek Nagar of Govindpur and village Gadra . The residents of these villages often try to scale the perimeter wall of the power plant through the houses located close to the perimeter wall to

steal the waste materials of the company which are costly. The anti – national elements can also take advantage of it to indulge in sabotage activities.

The perimeter wall of approx 5 kms length was constructed long ago and it needs repairing immediately. The uneven masonry perimeter wall of the plant is of very low height at some places which makes it vulnerable from security angle. It should be increased at many places from its present height of 5 feet and made even with the rest of the perimeter wall with minimum height of 6 to 8 feet.

Apart from it, there is no concertina wire fencing to protect the plant. Immediate fencing by Concertina wire on top of the of concrete / brick wall is required immediately.

The houses located very close to perimeter wall should be shifted to avoid any security lapse.

Automation of Access control system and integration with Command & Control Centre.

One of the most important aspects of plant security is Access Control of man, material and vehicle. Access control systems are crucial as they provide business/ industry and building with an extra layer of security and control over their assets. The purpose of an access control system is to provide quick and convenient access to those persons who are authorized, while at the same time, restricting access to unauthorized people.

In Tata Power Jojobera the entry/exit of contract workmen is based on paper gate pass issued by the security. It gives ample scope of duplication and imitation of pass, impersonation, trespass by miscreants and other people having vested interests. The manual recording of access does not give the accurate number of employees entering and exiting the power plant especially in any operational, sensitive and critical area of the plant .

Similarly, in absence of integrated vehicle access control system, the security personnel are unable to control the movement (entry / exit) of vehicles. Most of the industries have already adopted integrated biometric access control system as well as vehicle access control system. Hence, there is an immediate need of establishing integrated biometric access control system as well as vehicle access control system.

Installation of CCTV & Command Control Centre (CCC).

At Tata Power Jojobera, the surveillance system needs to be strengthened. At present, there are only 41 security cameras, which are not sufficient for the surveillance of a sprawling complex built in an area of 163 acres. At least, 50 more surveillance cameras are required for proper monitoring of the activities in and around the complex to cover all sensitive areas of plant.

In the absence of integrated Command & Control Centre, the monitoring of CCTV and quick response is neither adequate nor effective. The Command & Control (C&C) system is the heart of security system which provides the real time information, communication mechanism and immediate response from security control room. It provides comprehensive

solution for detection, identification & possible interception of threats. In order to manage daily security events / incidents there is an immediate need of installation of adequate number of CCTVs covering perimeter gates, vital installation and sensitive areas with round the clock system of monitoring at security control room. It should also be equipped with effective communication system to respond effectively in an emergency.

Sri Lukhai
10/02/2021

AD/TATANAGAR

ASSISTANT DIRECTOR
SIB (MHA) GOVT. OF INDIA
JAMSHEDPUR.

	U2 PLF %	U3 PLF %
FY-21	71	61
FY-22	81	81
FY-23	85	83
FY-24	83	89
FY-25	88	83

Kumar Dilip

From: Saroj Kumar
Sent: 23 July 2020 08:13
To: Singh Vikrant
Cc: ajaykumar.singh; ashutosh.p
Subject: Fwd: TPCL Unit#2 and Unit#3 PLF FY-21 to FY-25
Attachments: TPCL Unit2 and unit3 PLF LTP.XLSX

[EXTERNAL sender, Exercise caution..!]

Pls find yearly data.
Monthly data is not available

Get Outlook for Android

From: Ranjan Kumar <ranjan.kumar2@tatasteel.com>
Sent: Thursday, July 23, 2020 12:17:34 AM
To: Saroj Kumar <saroj.kumar@tatasteel.com>
Cc: Ajay Kumar Singh <ajaykumar.singh@tatasteel.com>
Subject: TPCL Unit#2 and Unit#3 PLF FY-21 to FY-25

Sir,
PFA.

Regards,

Ranjan Kumar
Manager Electrical Maintenance-Electrical Transmission & Distribution (LDC)

Tata Steel Limited
Load Dispatch Centre | TATA Steel Jamshedpur works | Jamshedpur 831 001
Tel +91-657 6643152 | Mobile +91-8235003640
ranjan.kumar2@tatasteel.com | http://www.tatasteel.com

WORK ORDER

VENDOR DETAILS	ORDER DETAILS
Vendor Code : 100010084 TCR ADVANCED ENGG. PVT LTD 36/2/9,1ST FLOOR,VADODARA VADODARA: 390010,India Attn : ABC Tel : 07574805594 E-mail : TCRADVANCED@TCRADVANCED.COM Vendor GST No.: 24AABCT3473E1ZL Vendor PAN No. AABCT3473E	Work Order Ref : 6000049646 Date : 13.07.2020 Currency : INR Company Representative : Manas Deshmukh Email : MANASD@TATAPOWER.COM Our Reference No : Contractor's Quote reference : TCR/QUO/20-21/003 Version Number 0 OLA Reference No :- NA Company GST No.:20AAACT0054A2ZE

Sub.: Remnant Life Assessment of Unit#2, 3 & 4 Boilers

(i) Our Ref.: RFQ Ref. No. Doc2361580183 dated 10.04.2020
(ii) Your Offer Ref.: TCR/QUO/20-21/003 dated 17.04.2020
(iii) Your E-mail dated 05.06.2020 & 25.06.2020 regarding negotiation.

The Work Order constitutes Company's offer to Contractor upon the terms and conditions stated herein and shall become a binding Contract, when it is accepted either by Contractor's acknowledgement or performance. The Work Order expressly limits acceptance to the terms and conditions stated herein. Any additional or different terms or conditions proposed by Contractor are objected to and hereby rejected, including without limitation, Contractors quotation or acknowledgement forms. Any reference in the Work Order to Contractors quotation or proposal does not imply acceptance of any terms or conditions in that quotation or proposal. It is important that Contractor signs and returns the Work Order copy within (3) days of receipt. No other forms of acceptance will be accepted. Failure to return the acceptance does not diminish the responsibilities as set forth herein, but may result in delay to any payment that may be due to and may be a cause of termination of this Work Order.

TOTAL ORDER VALUE (Exclusive of all taxes, levies and duties) : INR 55,50,000.00.
In words: (Rupees Fifty five lakh fifty thousand only).

Authorized Signatory :	**CONTRACTOR'S ACCEPTANCE** **Signature:** _____ **Name:** **Designation :**
Approver Name: Narendra Kumar	Approver Designation: Head - Contracts (Renewab

This Purchase Order/Contract will be executed / suspended and,managed till Contract completion/commissioning of the work by order Manager (details below):
Order Manager: Mr. Tapas Mahato, Mob. 9204425429; E-mail: tapas.mahato@tatapower.com.

The current version will automatically supersede the previous version as legal document on 08.02.2021

This is a computer generated document and does not require a signature.

WORK ORDER DETAILS
WORK ORDER REF : 6000049646
Version Number 0

PRICE SCHEDULE

Item No.	HSN/SAC Code	Service Description	Qty	UOM	Unit Price	Amount
10	998719	REMNANT LIFE ASSESSMENT OF IN: Integrated GST - 18 %	1.000	AU	18,50,000.00	1850000.00
20	998719	REMNANT LIFE ASSESSMENT OF IN: Integrated GST - 18 %	1.000	AU	18,50,000.00	1850000.00
30	998719	REMNANT LIFE ASSESSMENT OF IN: Integrated GST - 18 %	1.000	AU	18,50,000.00	1850000.00

This item includes the following services:

S.No	HSN/SAC Code	Service Code	Service Description	Qty	UOM	Unit Price	Amount
10.10	998719	4157838	RLA TESTING FOR 120 MW BOILER	1	AU	18,50,000.00	18,50,000.00
20.10	998719	4157838	RLA TESTING FOR 120 MW BOILER	1	AU	18,50,000.00	18,50,000.00
30.10	998719	4157838	RLA TESTING FOR 120 MW BOILER	1	AU	18,50,000.00	18,50,000.00
Total Order Value (Exclusive of all taxes, levies and duties)							55,50,000.00

Total Order Value : Rupees Fifty five lakh fifty thousand only (Exclusive of all taxes, levies and duties).

COMMERCIAL CONDITIONS

1. **Scope :**

   As per the Scope of Work issued with RFQ and as attached in the PO.

2. **Price Basis :**

   For The Tata Power Co. Limited, Jojobera Power Plant, Jamshedpur.

3. **Completion Schedule/Service to be performed at :**

   Service to be performed for The Tata Power Co. Limited, Jojobera Power Plant, Jamshedpur during ASD of Unit#2, 3 & 4.

4. **Payment Terms :**

   60 Days From GR date

   100% payment including taxes within 60 days from the date of receipt of error-free invoice based on actual completion of work at site duly certified by Order Manager.

5. **Taxes and Duties :**

   GST as applicable payable extra. Present rate is 18%.

6. **Anti Profiteering Clause:**

Notwithstanding anything contained in the Contract, in the event of introduction of any new legislation or any change or amendment or enforcement of any Act or Law, or any change in the interpretation by the Supreme Court of India of any said Act or law, rules or regulations of Government of India or State Government(s) or Public Body which becomes effective after the bid date to the completion of work including defect liability period , if any, which results in any decrease in the cost of the works through reduced liability of taxes & duties, increase in the input tax credits, the Supplier shall pass on the benefits of such reduced cost, taxes or duties to The Tata Power Co. Ltd. to the extent which is directly attributable to such introduction of new legislation or change or amendment as mentioned above as per Anti-profiteering Rules, 2017, hereby, "Tax" or "tax" shall include taxes, duties, levies, cess and similar imposts by whatever name called whether in the nature of Indirect Tax or direct taxes and whether or not imposed by the Central government, state government, local or municipal authority or any other statutory body

7. Compliance of Local Laws:

The Contractor shall be fully responsible for the due compliance by him and his sub-contractors with all statutory requirements and with all applicable labour laws including Contract Labour Abolition and Regulation Act, Workmen's Compensation Act, P.F./E.S.I., Labour welfare fund, Act, etc. as may be applicable to the Contractor, the sub-contractors and their employees. The locations where Allied Manpower Management System (On-line system) has been implemented, the Contractor shall ensure necessary declarations and documents are provided in the system, as per the role of the Contractor envisaged in the system.

The Contractor should get in touch with the local HR/IR/ES&A teams for completion of Statutory compliances before start of the work. The contractor should also ensure that he provides correct and complete PF compliance data for a wage month in the format provided by the HR/IR/ES&A teams on or before 15th of the subsequent month, failing which penalty of 1% of the value of the Invoice, per day of delay would be deducted from the Invoice raised. Further, the management will also have a right to suspend the work in case of delay in submitting the PF data.

All other compliances required by HR/IR/ES&A teams should also be provided as per timelines.

The Contractor shall fully indemnify and save harmless the Owner from and against all claims, demands, expenses, losses, liabilities, charges, actions, suits and proceedings whatsoever including claims under aforesaid Acts and laws which may be brought or made against the Owner, its Officers or servants by reason or in consequence of any matter or thing done or omitted or delaying the submission of data by the Contractor and/ or its sub-contractors and all costs, charges and expenses which may become payable by the Owner in respect thereof.

8. Performance Parameters & Deductions due to non compliance :

Not applicable.

9. Order Manager :

This order shall be managed by Mr. Tapas Mahato, Mob. 9204425429; E-mail: tapas.mahato@tatapower.com. You are requested to mark him for SES / Invoice in ARIBA Network. from Owner. You are requested to contact him/her for further queries related to execution.

10. Contract Performance Bank Guarantee :

Not applicable.

11. Order of Precedence :

In the event of conflict between the provision of this order along with its attachments and annexure, the following order of precedence shall apply so that the conflicting provision(s) in the document lower in the order of precedence set out below shall give way to the conflicting provision(s) in the document higher in the order of precedence, namely:

1. Work Order (with 'Commercial Conditions')
2. Special Terms and conditions
3. General Terms and conditions
4. Technical Specification

12. Modifications to the General Conditions of Contract :

1. The engaged personnel will abide by all safety requirement related to the job and as per TPCL CSCC guide lines . Noncompliance on safety will attract penalty as per CSCC guidelines.

2. The service provider will be liable to fulfill all statutory requirements.
3. All the transportation charges (to & fro), lodging, boarding etc. of your people will be in your scope.
4. The job shall be conducted during ASD of Unit#2, 3 & 4. Confirmation will be given 7 days prior to the desynchronization of machine. However, considering the COVID situation, the feasibility regarding execution of the job shall be studied jointly and siutable decision shall be taken based up on situation as per the directives from government authority.
5. Party need to adhere the Gate pass procedure of Tata power as follows:

Gate Passes for Regular Jobs and Temporary Jobs for services.

1. Standard Gate Pass application format available with HR/IR department
2. ESIC IP no. for all individual eligible workmen to be attached or if new then TIC.
3. Insurance under WC (Workmen Compensation) policy required if for eligible workmen withdrawing more than Rs.21,000/- salary per month.
4. Individual EPF code no. & UAN of workmen/Vendor/agency/partner copy to be enclosed.
5. Application on letter head enclosed with Gate Pass application format with all details.
6. For Medical & Safety allowed, after recommended by HOD & approved by competent authority (HR/IR will verify all the legal documents i,e;WO, Labour License, Individual PF Code, UAN, ESIC IP No., Police verification and other details as per gate pass format).
7. Gate Passes will be issued as per validity of Medical & Safety or Calendar year quarterly whichever is earlier or short period jobs(Temporary gate pass) on produce of Safety cum Medical Card, Gate Pass filled format, Employment Cards & Attendance cards.
8. Safety & Medical will be valid for six months.
9. For renewal of gate passes - Application on letter head enclosed with Gate Pass application format with all details along with Medical cum Safety Cards, Gate pass filled format, Employment cards & Attendance cards.
10. Once the job over all gate passes must be return to Security after forwarded by HOD & verified by HR/IR.
11. Monthly Statutory documents (Muster roll, Wage Register, Leave & Bonus sheet, PF & ESIC Monthly challan, ERC of PF and History sheet of ESIC) to be submitted on or before 20th of every month.
12. Renewal of Gate Passes and Monthly bills to be cleared after checking of Muster Roll, Wage Register, PF & ESIC Challan, ERC of PF and History sheet of ESIC from individual contribution of previous month.
13. Muster Roll / Attendance Register (Form – XVI) must be verified by the department before certification of Bills.
14. In case of separation or termination of any workers, Full & Final payment will verified by HR/IR as per provision of all applicable acts. Gate pass will also submit to HR/IR along with settlement documents.
Gate passes for Contractor and Partner will be issued for six months after Medical & Safety.

13. Annexure

S.No	HSN/SAC Code	Service Code	Short Description	Long Description	Qty	UOM	Delivery Date
10.10	998719	4157838	RLA TESTING FOR 120 MW BOILER	Remnant Life Assessment of Unit #3 Boiler. Capacity: 120 MW Make:BHEL Testing: The following testing will be performed according to IBR 391 (A)TABLE1 clause (New amendment). 1. Visual Inspection 2. Dimensional measurementfor swelling 3. Ultrasonic Thickness Measurement 4. FiberopticInspection	1	AU	30.03.2021

S.No	HSN/SAC Code	Service Code	Short Description	Long Description	Qty	UOM	Delivery Date
				5.Ultrasonic Flaw Detection 6. Magnetic Particle / Dye PenetrantTesting 7.In-situ Metallography # Scanning Electron Microscopy 8. HardnessTesting 9.Accelerated Creep Rupture (ACR) Test 10. Deposit Analysis 11.Destructive Testing of tubes. 12. Testing of Boiler Tubes for HydrogenEmbrittlement Damage Visual Inspection Chemical Analysis PhysicalTesting Microstructure Examination Hardness Testing Internal Scale Analysis			
20.10	998719	4157838	RLA TESTING FOR 120 MW BOILER	Remnant Life Assessment of Unit #3 Boiler. Capacity: 120 MW Make:BHEL Testing: The following testing will be performed according to IBR 391 (A)TABLE1 clause (New amendment). 1. Visual Inspection 2. Dimensional measurementfor swelling 3. Ultrasonic Thickness Measurement 4. FiberopticInspection 5.Ultrasonic Flaw Detection 6. Magnetic Particle / Dye PenetrantTesting 7.In-situ Metallography # Scanning Electron Microscopy 8. HardnessTesting 9.Accelerated Creep Rupture (ACR) Test 10. Deposit Analysis 11.Destructive Testing of tubes. 12. Testing of Boiler Tubes for HydrogenEmbrittlement Damage Visual Inspection Chemical Analysis PhysicalTesting Microstructure Examination Hardness Testing Internal Scale Analysis	1	AU	30.03.2021
30.10	998719	4157838	RLA TESTING FOR 120 MW	Remnant Life Assessment of	1	AU	30.03.2021

WORK ORDER DETAILS
WORK ORDER REF : 6000049646
Version Number 0

S.No	HSN/SAC Code	Service Code	Short Description	Long Description	Qty	UOM	Delivery Date
			BOILER	Unit #3 Boiler. Capacity: 120 MW Make:BHEL Testing: The following testing will be performed according to IBR 391 (A)TABLE1 clause (New amendment). 1. Visual Inspection 2. Dimensional measurementfor swelling 3. Ultrasonic Thickness Measurement 4. FiberopticInspection 5.Ultrasonic Flaw Detection 6. Magnetic Particle / Dye PenetrantTesting 7.In-situ Metallography # Scanning Electron Microscopy 8. HardnessTesting 9.Accelerated Creep Rupture (ACR) Test 10. Deposit Analysis 11.Destructive Testing of tubes. 12. Testing of Boiler Tubes for HydrogenEmbrittlement Damage Visual Inspection Chemical Analysis PhysicalTesting Microstructure Examination Hardness Testing Internal Scale Analysis			

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WORK ORDER

VENDOR DETAILS	ORDER DETAILS
Vendor Code : 100000613 GE POWER India Limited BLOCK-DN, PLOT NO.-62,,West Bengal KOLKATA: 700091,India Attn : Mr. Tarapada. Das Tel : 033-40060147 E-mail : tarapada.das@ge.com Vendor GST No.: 19AABCA8679F1ZB Vendor PAN No. AABCA8679F	Work Order Ref : 6000051377 Date : 06.11.2020 Currency : INR Company Representative : Probir Kumar Paul Email : PROBIRPAUL@TATAPOWER.COM Our Reference No : 2021Y0294 Contractor's Quote reference : 1541283 Version Number 0 OLA Reference No :- NA Company GST No.:20AAACT0054A2ZE

Dear Sir,

Sub: Residual Life Assessment of Unit # 3 120 MW Turbine and its Accessories for jojobera power plant

Our Ref : RFQ No. Doc2511914428
Your Ref : T20E1541283 , OFFER NO 1541283

The Work Order constitutes Company's offer to Contractor upon the terms and conditions stated herein and shall become a binding Contract, when it is accepted either by Contractor's acknowledgement or performance. The Work Order expressly limits acceptance to the terms and conditions stated herein. Any additional or different terms or conditions proposed by Contractor are objected to and hereby rejected, including without limitation, Contractors quotation or acknowledgement forms. Any reference in the Work Order to Contractors quotation or proposal does not imply acceptance of any terms or conditions in that quotation or proposal. It is important that Contractor signs and returns the Work Order copy within (3) days of receipt. No other forms of acceptance will be accepted. Failure to return the acceptance does not diminish the responsibilities as set forth herein, but may result in delay to any payment that may be due to and may be a cause of termination of this Work Order.

TOTAL ORDER VALUE (Exclusive of all taxes, levies and duties) : INR 37,24,906.00.
In words: (Rupees Thirty seven lakh twenty four thousand nine hundred six only).

Authorized Signatory :	**CONTRACTOR'S ACCEPTANCE** **Signature:** _____ **Name:** **Designation :**
Approver Name: Jayashree Choudhury	Approver Designation: Head-Cont. & Mat. Jojober

This Purchase Order/Contract will be executed / suspended and,managed till Contract completion/commissioning of the work by order Manager (details below):
Order Manager: Mr. Pravin Kumar (Group Head - MMD)

The current version will automatically supersede the previous version as legal document on 08.02.2021

This is a computer generated document and does not require a signature.

WORK ORDER DETAILS
WORK ORDER REF : 6000051377
Version Number 0

PRICE SCHEDULE

Item No.	HSN/SAC Code	Service Description	Qty	UOM	Unit Price	Amount
10	998717	RLA 120MW Turbine & its Aux. IN: Integrated GST - 18 %	1.000	AU	37,24,906.00	3724906.00

This item includes the following services:

S.No	HSN/SAC Code	Service Code	Service Description	Qty	UOM	Unit Price	Amount
10.10	998717	4079304	120MW Turbine RLA	1	AU	26,07,435.00	26,07,435.00
10.20	998717	4080097	120MW Turbine connected Pipe line RLA	1	AU	5,58,735.00	5,58,735.00
10.30	998717	4080096	120 MW LPBP Stop &control valves.	1	AU	3,72,491.00	3,72,491.00
10.40	998717	4080095	120MW HPBP &LPBP stop &CV servo motor	1	AU	1,86,245.00	1,86,245.00
Total Order Value (Exclusive of all taxes, levies and duties)							37,24,906.00

Total Order Value : Rupees Thirty seven lakh twenty four thousand nine hundred six only (Exclusive of all taxes, levies and duties).

COMMERCIAL CONDITIONS

1. **Scope :**

   Residual Life Assessment of Unit # 3 120 MW Turbine and its Accessories for jojobera power plant

2. **Price Basis :**

   The prices stated above are on FOR Jojobera Power Plant basiis. This is a fixed price contract. The prices shall remain firm and no escalation of whatsoever nature will be permissible during the tenure of the contract. Any changes in the taxes & duties will be to Purchasers account, except beyond the guaranteed delivery period, which will be at vendors account. Supply of Material and related services included in the unit price . Boarding , lodging , Travelling and local conveyance is in your scope and included in the price.

3. **Completion Schedule/Service to be performed at :**

   Job to be completed during outage of unit # 3 as per outage scheduled. Mobilization has to be done immediately after confirmation.

4. **Payment Terms :**

   30 days From GR date w/o Retention

   100% payment with in 30 Days of completion of job and certification of bill and submission of report

   Please select the Scanning Location : 1000:JO01-JOJOBERA

5. **Taxes and Duties :**

   GST @ 18 % EXTRA

6. Anti Profiteering Clause:

Notwithstanding anything contained in the Contract, in the event of introduction of any new legislation or any change or amendment or enforcement of any Act or Law, or any change in the interpretation by the Supreme Court of India of any said Act or law, rules or regulations of Government of India or State Government(s) or Public Body which becomes effective after the bid date to the completion of work including defect liability period , if any, which results in any decrease in the cost of the works through reduced liability of taxes & duties, increase in the input tax credits, the Supplier shall pass on the benefits of such reduced cost, taxes or duties to The Tata Power Co. Ltd. to the extent which is directly attributable to such introduction of new legislation or change or amendment as mentioned above as per Anti-profiteering Rules, 2017, hereby, "Tax" or "tax" shall include taxes, duties, levies, cess and similar imposts by whatever name called whether in the nature of Indirect Tax or direct taxes and whether or not imposed by the Central government, state government, local or municipal authority or any other statutory body

7. Compliance of Local Laws:

The Contractor shall be fully responsible for the due compliance by him and his sub-contractors with all statutory requirements and with all applicable labour laws including Contract Labour Abolition and Regulation Act, Workmen's Compensation Act, P.F./E.S.I., Labour welfare fund, Act, etc. as may be applicable to the Contractor, the sub-contractors and their employees. The locations where Allied Manpower Management System (On-line system) has been implemented, the Contractor shall ensure necessary declarations and documents are provided in the system, as per the role of the Contractor envisaged in the system.

The Contractor should get in touch with the local HR/IR/ES&A teams for completion of Statutory compliances before start of the work. The contractor should also ensure that he provides correct and complete PF compliance data for a wage month in the format provided by the HR/IR/ES&A teams on or before 15th of the subsequent month, failing which penalty of 1% of the value of the Invoice, per day of delay would be deducted from the Invoice raised. Further, the management will also have a right to suspend the work in case of delay in submitting the PF data.

All other compliances required by HR/IR/ES&A teams should also be provided as per timelines.

The Contractor shall fully indemnify and save harmless the Owner from and against all claims, demands, expenses, losses, liabilities, charges, actions, suits and proceedings whatsoever including claims under aforesaid Acts and laws which may be brought or made against the Owner, its Officers or servants by reason or in consequence of any matter or thing done or omitted or delaying the submission of data by the Contractor and/ or its sub-contractors and all costs, charges and expenses which may become payable by the Owner in respect thereof.

8. Performance Parameters & Deductions due to non compliance :

1. Job must be done as per our enquiry scope else will be treated as non compliance
2. In case job is not completed within the stipulated time or mutual agreement between user and party then LD @ 1 % of order value on per week basis subject to maximum 10 % of the order value will be deducted from the bills.
3. Lodging, boarding , travelling and local conveyance included in the quoted price.

9. Order Manager :

This order shall be managed by Mr. Pravin Kumar (Group Head - MMD) Payment Related Issue please call at 022-6717-3636 between 10 am to 5 pm from Monday to Friday For all finance related queries (Status of payment, clarification of deduction, queries in relation to invoice raised, balance confirmation, reconciliation) please call at 022-6717-3636 between 10 am to 5 pm from Monday to Friday. For speedy resolution of your queries, request you to log your requests/issues through this new number ONLY, and may refrain from calling up any other number." from Owner. You are requested to contact him/her for further queries related to execution.

10. Contract Performance Bank Guarantee :

Not applicable

11. Order of Precedence :

In the event of conflict between the provision of this order along with its attachments and annexure, the following order of precedence shall apply so that the conflicting provision(s) in the document lower in the order of precedence set out below shall give way to the conflicting provision(s) in the document higher in the order of precedence, namely:

1. Work Order (with 'Commercial Conditions')
2. Special Terms and conditions
3. General Terms and conditions
4. Technical Specification

12. Modifications to the General Conditions of Contract :

All other terms & conditions shall be as per the attached General Terms & Conditions-Service and Safety Terms and condition, which are an integral part of this work order.

13. Annexure

The following documents shall form a part of this Work Order:
a) General Terms and Conditions- Supply and Service
b) Safety terms and Conditions-Service
c) Vehicle checking list Annexure-1

S.No	HSN/SAC Code	Service Code	Short Description	Long Description	Qty	UOM	Delivery Date
10.10	998717	4079304	120MW Turbine RLA	120MW Turbine RLA Residual Life Assessment of Unit #3 120MW Turbine and its Accessories Areas to be covered: Main HP-IP & LP Turbine, Condenser, Oil Pipelines and Lube oil pipe Lines, Main steam pipe line, Drip Lines of Heaters. Necessary condition assessment studies to evaluate remaining life of all components subjected to CREEP AND FATIGUE viz. Steam turbine both (outer & Inner) casings, rotors, Diaphragms, Liners Blades, Steam turbine valves, Steam chest, nozzle chamber, nozzle segments, Casing Studs and bolts, Turbine bearings and thrust pads, TG coupling bolts, bearing pedestals, The Nos and location of sampling shall be appropriately chosen to be able to make reliable assessment. Condenser visual examination is to be carried out regarding the condition of the condenser with respect to corrosion due to water. The report	1	AU	30.06.2021

S.No	HSN/SAC Code	Service Code	Short Description	Long Description	Qty	UOM	Delivery Date
				shall indicate possible reasons of problems and solutions thereof. The Lube Oil pipe lines are to be visually inspected, NDT to be done at least in 05 Welding joints for each Lube Oil and De-metering to be done at specific places and condition assessment to be reported. Main steam inlet piping to casing on TG floor, CRH pipe line, HRH pipe line & Extraction pipe line to be done VE, DPT, MPI, MT, HB and Drip Lines De metering to be done at all bends of all the drip lines of all heaters ,& randomly at few points in the straight lines & the condition assessment to be reported. A list of tests to be carried out on various parts is enclosed as Annexure-I. Party has provide the critical findings of HP-IP &LP Steam turbine casing , rotor & valve body from various NDT, the results of stress analysis through finite element computations and estimated life damage fractions due to fatigue and creep.			
10.20	998717	4080097	120MW Turbine connected Pipe line RLA	120MW steam Turbine connected Pipe line RLA	1	AU	30.06.2021
10.30	998717	4080096	120 MW LPBP Stop &control valves.	120 MW LPBP Stop &control valves.	1	AU	30.06.2021
10.40	998717	4080095	120MW HPBP &LPBP stop &CV servo motor	120MW HPBP &LPBP stop & control valve servo motor	1	AU	30.06.2021

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ANNEXURE R19

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

	Name of Company	**Tata Power Company Limited**					**Activity/Description**
	Name of the Power Station	**Jojobera Thermal Power Plant Unit 2**					
						(Rs. In Lakh)	
Sl. No.	ITEM	2015-16	2016-17	2017-18	2018-19	2019-20	
1	2	3	4	5	6	7	9
	Breakup of O&M expenses :			Actual			
(A)	**Break-up of R&M Expenses**	**1217.56**	**1209.83**	**1520.82**	**2024.97**	**1266.30**	
1	Consumption of Stores and Spares	108.34	174.74	122.50	253.97	151.23	Consumption of Store
2	Repair and Maintenance	1109.21	1035.09	1398.32	1771.00	1115.07	R&M Service Cost
(B)	**Break-up of Employee Expenses**	621.65	711.24	729.13	819.97	816.94	
1	Salaries, wages and allowances	592.06	678.79	676.76	712.84	712.93	Salaries, wages, allowances etc
2	Staff welfare expenses	4.28	2.45	2.90	4.91	12.47	Staff welfare expenses
3	Terminal Liabilities	25.31	30.00	49.47	102.22	91.54	Terminal Liabilities
(C)	**Breakup of A&G Expenses :**	**389.00**	**518.16**	**592.08**	**547.52**	**628.27**	
1	Insurance	146.77	116.55	93.37	57.08	113.80	Expenses towards Stock and Asset Insurance
2	Security	44.91	55.71	55.19	44.53	54.08	Expenses towards Security Manpower
	Administrative Expenses :						
3	Rent	0.00	2.20	13.09	8.91	7.55	Rent for Quarters
4	Traveling and conveyance	27.33	19.17	21.74	24.50	23.36	Expenses towards Vehicle Hire Charges, Official Travelling Expenses etc.
5	Communication expenses	2.43	1.91	3.20	2.99	4.63	Expenses towards Landline, Internet and Broandband
6	Advertising	0.06	9.77	6.98	17.07	22.68	Application fees, Advertising expenses etc
7	Miscellaneous Expenses	0.19	82.52	96.36	2.44	5.53	Other miscellaneous Head
	Sub-Total (Administrative Expenses)	**30.00**	**115.57**	**141.38**	**55.91**	**63.74**	
8	Other General Expenses	167.31	230.33	302.15	389.99	396.65	Expenses towards Auditor Remuneration, Consultant Expenses, Local doctors Fees, Pathological Test, Pantry, Courier, Rates and Taxes, Rent of Local Guest House, Printing,Provision, Stationery,Training, GST Audit Fees and other certification charges, R&R Gift etc .
(D)	Corporate office expenses allocation	1352.31	886.35	1228.45	1372.94	1011.79	Head Office allocation
(E)	Water Charges	953.74	410.13	436.38	450.37	440.48	Raw Water Charges
(F)	Ash Disposal Expenses	502.01	457.57	442.66	366.03	415.39	Ash Disposal Expenses
	Total O&M Expenses	5036.26	4193.28	4949.53	5581.79	4579.17	

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

	Name of Company	**Tata Power Company Limited**					**Activity/Description**
	Name of the Power Station	**Jojobera Thermal Power Plant Unit 2**					
						(Rs. In Lakh)	
Sl. No.	ITEM	2015-16	2016-17	2017-18	2018-19	2019-20	
1	2	3	4	5	6	7	9
	Breakup of O&M expenses :			Actual			
(A)	**Break-up of R&M Expenses**	**1385.53**	**1448.45**	**1511.38**	**1007.80**	**1285.17**	
1	Consumption of Stores and Spares	125.47	157.81	183.08	194.37	146.19	Consumption of Store
2	Repair and Maintenance	1260.06	1290.64	1328.29	813.43	1138.98	R&M Service Cost
(B)	**Break-up of Employee Expenses**	621.65	711.24	729.13	819.97	816.94	
1	Salaries, wages and allowances	592.06	678.79	676.76	712.84	712.93	Salaries, wages, allowances etc
2	Staff welfare expenses	4.28	2.45	2.90	4.91	12.47	Staff welfare expenses
3	Terminal Liabilities	25.31	30.00	49.47	102.22	91.54	Terminal Liabilities
(C)	**Breakup of A&G Expenses :**	**355.39**	**431.55**	**562.09**	**531.23**	**634.61**	
1	Insurance	121.27	93.27	75.19	45.05	91.17	Expenses towards Stock and Asset Insurance
2	Security	44.91	55.71	55.19	44.53	54.08	Expenses towards Security Manpower
	Administrative Expenses :						
3	Rent	0.00	2.84	13.09	8.91	7.55	Rent for Quarters
4	Traveling and conveyance	26.43	18.61	22.25	24.16	23.20	Expenses towards Vehicle Hire Charges, Official Travelling Expenses etc.
5	Communication expenses	1.97	1.91	3.20	2.99	4.63	Expenses towards Landline, Internet and Broandband
6	Advertising	0.06	9.77	6.98	17.07	21.89	Application fees, Advertising expenses etc
7	Miscellaneous Expenses	0.19	79.87	94.48	2.39	6.21	Other miscellaneous Head
	Sub-Total (Administrative Expenses)	**28.65**	**112.99**	**140.01**	**55.53**	**63.46**	
8	Other General Expenses	160.56	169.56	291.70	386.11	425.90	Expenses towards Auditor Remuneration, Consultant Expenses, Local doctors Fees, Pathological Test, Pantry, Courier, Rates and Taxes, Rent of Local Guest House, Printing,Provision, Stationery,Training, GST Audit Fees and other certification charges, R&R Gift etc .
(D)	Corporate office expenses allocation	1404.67	886.35	1188.61	1341.57	1014.24	Head Office allocation
(E)	Water Charges	929.78	454.87	431.27	446.20	427.71	Raw Water Charges
(F)	Ash Disposal Expenses	466.74	451.58	449.32	371.17	406.31	Ash Disposal Expenses
	Total O&M Expenses	5163.77	4384.04	4871.79	4517.94	4584.99	

R & M Activities at Jojobera	
Sl.	**Job Description**
1	O & M of AC System
2	O&M OF CONTROL ROOM AC System
3	Testing,calibration & certifi. of IMTES
4	Pressure Vessel Testing and Certification
5	Annual maintenance Contract of Pressure parts
6	AMC MachineTool
7	Online Auak Sealing jobs
8	Hring of Hydra
9	Service Engineer Charges - as & when required
10	Servicing of Journal Assembly XRP783/803
11	Annual Maintenance of Diesel Generator Sets
12	Refurbishment Jobs - as & when required
13	RAPH main drive gearbox overhauling activity
14	Filtration of Coal mill gearbox oil
15	PVC Fills supply, gluing & replacement activity - as & when required
16	CT Basin(s) sealing and cleaning job
17	Performance Test of CT Fans - as & when required
18	Refurbishment activities of Strainer
19	Coal Flow Stabilization by removing chokage - as & when required
20	Vibration Analysis - of various equipment
21	Condition monitoring Activities
22	Flow measurement of Pumps - as & when required
23	Balancing job of impellers of various pumps
24	Piping activities as & when required
25	Refurbishment of Air Handling Unit
26	Piping jobs as & when required
27	Performing dirty and clean air flow test of coal mill
28	Fixing Ceremic pad insulation of turbine
29	Service charges for Coal mill damper and gate
30	Annual maintennace for Referigent Air Dryer
31	Dew Point Measurement Activity
32	Boiler Misc Jobs
33	Servicing of HP control valve actuator
34	RAPH air motor servicing job
35	Replacement activity of Venturi and inner cone assembly
36	Replacement activity of Classifier and inner cone assembly
37	Structural Jobs - as & when required
38	Annual Maintenance of Fly Ash System
39	Coil replacement job (Economizer etc.) - as & when required
40	Minor Overhauling of Turbine & Gen - Schedule Outage
41	Foundation & Piping job - as & when required
42	Turbine Condition analysis
43	Annual Maintenance Contract of Wet system
44	Consumables - as & when required
45	CFD Analysis activity in RAPH Ducts
46	Annual Maintenace contract of Coal Mill System
47	Annual Maintenance Contract for TG and Boiler
48	Material shifting activities - as & when required
49	Overhauling job of SILO system
50	Boiler Fan Overhauling Job
51	Plastic Refractory application activity in Boiler
52	Oil Condition Analysis

53	High pressure Water Jet Cleaning activity of Condenser
54	Overhauling of Clinker Grinder
55	ESP washout activity - as & when required
56	Welding activities
57	Ash collection,cleaning and disposal activity
58	Boiler Passes - shutdown activities
59	Rebabiting of bearing - as & when required
60	CW pipe inspection,repairing,painting,BFV changing activtities
61	Electrostatic Precipitator Washout during shutdowns
62	Condenser tibe cleaning activties
63	Insulation & cladding application activities at various locations
64	Repairing job recovery water pump parts
65	PA DUCT repairing activity
66	Eddy current testing activity
67	Oil filtration of ID, FD, PA fans
68	Gland Packing Renewal activities
69	High Pressure Valve Servicing - as & when required
70	Safety Valve Setting by Trevi Test
71	Tuning/ Supervision activities for ESP
72	Material handling by Crane - as & when required
73	AMC Split & Window AC
74	NAS level test of Lube oil
75	Calibration of Vibration Analyzer
76	Silo and recovery sump pit cleaning
77	Boiler Tube Failure Analysis activity
78	Servicing of Gates and dampers
79	VOITH coupling servicing activity
80	Refurbishment of Ash plant Bends
81	LP Piping Jobs
82	Primary Air Duct repairing job
83	Testing and certification of Lifting tools
84	Coal Mill overhauling activities
85	AMC of BTG System
86	Line strengthening job of new rack
87	Drum Deposit Analysis activity
88	Servicing for HCSD pump
89	Ash Transmitter Vessel Refurbishment activity
90	Rotor Balancing balancing activity
91	Compressor stage servicing job
92	Condenser tube cleaning and activity
93	ESP Repairing and Welding job
94	Calibration of Particle Counting Machine
95	Overhauling of machine tool
96	AMC Ash Handling System
97	Expert Supervision for Cuplock Scaffolding
98	Services for inspection and repair.
99	Slurry line replacement activity - as & when required
100	Maintenance contract for AC Packaged System
101	Refurbishment activity of coal funnel
102	Vibration & Oil Analysis
103	Drum Deposit Analysis
104	Safety Valve Servicing for 3 Years
105	Repairing of Coal Nozzle Tip Recondition
106	Refurbishment of hot air damper
107	Servicing of Turbiine SV&CV v/v actuator

108	Calib & mtce service for Vib. Analyzer
109	CT basin Channel cleaning activity
110	1200NB Butterfly Valve Servicing activity
111	Upgradation of Seal air fan
112	Bearing Rebabbiting activity
113	ESP inspection and overhauling activitiy in shutdown
114	V BELT SPB 1410
115	Thickness measurement
116	Condenser tube eddy current test
117	Scaffold erection and dismantling
118	Sampling & Testing TRF Oil 3rd Year
119	Tx Oil Testing
120	Expert servic Air Comp ZH710P 1st Year
121	AMC for fire DG Set
122	Sky climber assembly repairing activity
123	Oil Analysis
124	Destaging of Boiler Feed Pump
125	Upgradation of Vibration Analyzer
126	Major overhauling of Turbine and generator
127	Fabrication, erection, alignement of structurals
128	Reconditioning of CT Fan Blades
129	Expert servic Air Comp ZH710P 2ND Year
130	Repairing of Coal Nozzle Tip
131	To Cover Up Expansion Joint Internaly
132	Repairing Of Expansion Joint Externally
133	Duct & Expansion Joint Corner Welding
134	Boiler Fins Welding
135	Shielding
136	Stub Joint Replacement
137	Servicing Of 350Nb Globe Valve
138	Servicing Of 300Nb Globe Valve
139	Servicing Of 250Nb Globe Valve
140	Servicing Of 200Nb Globe Valve
141	Servicing Of 150Nb Globe Valve
142	Servicing Of 100Nb Globe Valve
143	Servicing Of 65Nb Globe Valve
144	Servicing Of 50Nb Globe Valve
145	Servicing Of 40Nb Globe Valve
146	Servicing Of 25Nb Globe Valve
147	Servicing Of Rhs Drum Safety Vv
148	Servicing Of Lhs Drum Safety Vv
149	Servicing Of Superheater Safety Vv
150	Servicing Of Crh Safety Valve
151	Servicing Of Hrh Safety Vv (Lhs)
152	Servicing Hrh Safety Vv (Rhs)
153	Servicing Of Soot Blower Safety V/V
154	Servicing Of Erv-1538Vx.10W
155	Servicing Of Lrsb
156	Servicing/Overhaul Of Wallblower
157	Refractory Application
158	Application Of Cat9 Cement
159	Checking Of Position Weld Erection Joint
160	Lfet Of Pressure Parts
161	Cold Bend Fabrication
162	Insulation Work

163	Annual Maintenance Contract For Fire Detection And Alarm System
164	Annual Maintenance Contract Of Intruder Alarm System
165	Calibration Activity of Instruments
166	Services For Honeywell Distributed Control System
167	Servicing Of Vibration Monitoring System For Turbine Protection
168	Repair And Maintenance Of Bhel Make Electronic Card
169	Service And Maintenance Of Secondary Air Damper Control Actuators
170	Services Of Mil Control Valve
171	Pi System Srp(Software Reliance Program)
172	Services Of Fisher Control Valve
173	Vms Servicing job
174	Services Of M/S Cci -Lpbp And Hpbp Control Valve
175	Annual Maintenance Contract For Field Inst
176	Annual Maintenance Contract For Field Inst Ash Plant
177	Services For Masibus Isas - Total Unit Alarm System
178	Srevicing Of Sertel Make Gps System
179	Testing & Certification Of Speed Probe
180	Service Of M/S Mil Control Valve
181	Overhauling & Service Of Feedgate Cylinder
182	Testing & Certification Of Speed Probe Service
183	Service Of Gas Analysers - Oxygen, Sox, Nox By Original Equipment Manufacturers
184	Annual Maintenance Contract Of High Concentration Slurry Discharge Nucleonic Density Meter
185	Servicing Of Laptops
186	Annual Maintenance Contract For Main Plant Btg System
187	Jointing & Testing Of Foc
188	Installation And Commission Of Alarm System
189	Comprehensive Annual Maintenance Of Internet Protocol Networking
190	Service And Maintenance Of SADC Actuators
191	Service And Maintenance Of Highway Addressable Remote Transducer Communicator Device
192	Calibration Of Master Calibrators
193	Annual Maintenance Contract Of Computer Assisted Coding System & Internet Protocol Systems
194	Provision For SOx NOx Remote Monitoring By Pollution Control Board
195	Service Support For BHEL DCS
196	Repairing Of Motorola Walkie & Talkie
197	Plant Information System Management For Srp(Software Reliance Program)
198	Milestone Licenses Upgrade (Care Pack)
199	Servicing Of Dell Desktop Pc
200	Service And Maintenance Of Ultrasonic Flow Transmitter
201	Annual Maintenance Contract For Coal Handling Plant Instrumentation system
202	Calibration Of Portable Flow Meter
203	Service And Maintenance For Boiler Lfo (Diesel Oil) Flowmeter
204	Analyser Card Repairing job
205	Service Of Control Valves
206	Erection And Commissioning Of Wt Programmable Logic Controllers
207	Supervision Charges
208	Copper Tubing Of Pneumatic Actuators
209	Deputation Of Service Engineer
210	Calibration Of Pressure Gauge, Pressure Switch & Pressure Transmitter
211	Servicing Of Low Pressure Bypass System
212	Miscellaneous Machining Job
213	Renewal of IT Service
214	Annual Maintenace Contract For Calibration Belt Scale 7A & 7B
215	Repairing Of Gas Analyser
216	Service Of Mil Control Valve
217	Comprehensive Annual Maintenance Contract Of IP Networking

218	Comprehensive AMC Of CACS (Computer Assisted Coding System) & Internet Protocol
219	Erection & Commisioning Of Flow Meter
220	Service Of Analysers By Original Equipment Manufacturers
221	Amc For Online Environment Data Transfer System
222	Operation , Maintenance & Service Of Secondary Air Damper Control Actuators
223	Supervison Charges
224	Online Leak Sealing Jobs
225	Erection & Commissioniing Of Auxillary Pressure Reducer Desuperheater
226	Maintenance Of Flow Meters
227	Erection And Commissioning Of Wt Progrmmable Logic Controller
228	Annual Maintennace Contract Of High Pressure Appliances
229	Consultancy Services For AERB License - Regulatory License
230	Annual Maintenance Contract For Camera And Accessories
231	Server And Monitor_Comp Amc_E Security
232	Softwares_Comp AMC_Esecurity
233	Repairing Of Gas Analyser
234	Amc For Online Env Data Transfer System
235	Service Of Analysers by OEM
236	Insttallation & Readiness of PC Based Operating System
237	Fabrication Erection Allignment And Maintenance Of Structurals
238	Installation,Commission Of Fire Detection Alarm (FDA)Panel
239	Annual Maintenance Contract For Hoist & Crane
240	Annual Overhauling Charges Of Hoist & Crane
241	Consumables For Hoist And Crane
242	Annual Maintenance Contract Of Emerson UPS System.
243	Annual Maintenance Contract Of UPS System For CCTV
244	Testing Of Lightning Arrestor In Transformer
245	Comprehensive Contract For APC/10KVA UPS System
246	Calibration Of Electrical Instruments
247	Annual Maintenance Contract For Siemens Variable Frequency Drives
248	Annual Servicing Contract Of Sertel Make GPS System
249	Overhauling and Repairing Of Transformers
250	Grating Fabrication & Erection Of Fibreglass Reinforced Plastic
251	FRP Grating Fabrication & Erection
252	Supervisory Charges For Retrofit Of M/S ABB Breaker
253	Repairing Work For PCB Equipment In Megger
254	Annual Service Contract For ESP Transformer & Rapper Controller
255	Annual Overhauling Contract For Generator Transformer
256	Annual Service Contract For M/S Auma Actuators
257	Refurbishment Charges For Cable Tray
258	Annual Service Contract For DILO Machine
259	Refurbishment Expenses Of 1.25MVA Transformer
260	Repair Expenses Of Insulation Resistance Tester
261	Grass Cutting at Various Locations
262	Overhauling Services of 10MVA Unit Auxillary Transformer
263	Contract For Electrical Services During Annual shutdown
264	Annual Overhauling Contract For Lt Motors Less Than45Kw
265	Annual Rewinding Services For Lt Motor <45Kw
266	Annual Service Contract For Lt Motors >45 Kw
267	Annual Maintenance Contract For Digital Video Recorder
268	Contracts For Scope Instruments - Testing Instruments
269	Annual Service Contract Of 6 Klph Oil Filter Machine
270	Annual Service Contract Of 1.2 Klph Oil Filter Machine
271	Annual Service Contract Of 225 Lph Oil Filter Machine
272	Electrical Services During Annual Shutdown

273	Expert Services For BHEL Digital Video Recorder System
274	Annual Contract For Operating Of Lift
275	Overhauling Of M/S GE Make Breaker
276	Liquid UI For Android Subscription Lice
277	Calibration Of Testing Equipments
278	Services For Lt Motors >45 kW
279	Electrical Firm Services Of Electrostatic Precipitators
280	Electrical Optional Services Of Electrostatic Precipitators
281	Charges For 6.6kkV Sulphur Hexafluride Breaker Services
282	Overhauling Expenses For HT Motor
283	Expenses For Testing Of Transformer Oil
284	Repair Expenses Of Caldyne Battery Charger
285	Testing Of Transformer Oil
286	Repair Of Afcoset Battery Charger
287	RSO Test Of 120 MW Generator Rotor
288	Electrical Firm Services of ESP
289	Testing Of High Voltage Breaker
290	Online PD Measurement of HT Equipments
291	Partial Discharge Measurement of Generator
292	Services of Air conditioning System
293	Spare Supply For AC System
294	Overhauling And Repairing of Transformers
295	Repair Of 6.6kV 277 kW HT Motor
296	Annual Maintenance Contract for M/S Hirel UPS
297	Repair Of Relay Cards In ESP/Chargers
298	RFI Survey of HT Equipments
299	Conveyance Charges
300	Installation & Commissioning Of 24V Battery Bank
301	AMC Of Electrical Maintenance
302	Services For Rotork Make Actuator
303	Maintenance Of Lighting System, Normal Emergency & Dc Area
304	AMC Of Electrical Maintenance For Coal Handling Plant
305	Annual Maintenance Contract Of Thyssen Lift.
306	Annual Maintenance Contract Of Otis Lift Of Jojobera Power Plant
307	HT Motor Overhauling
308	Electrical Maintenance Main Plant
309	Annual Shutdown Support Service
310	EHV Services Main Plant Unit
311	Lighting Maintenance Of Main Plant
312	Miscalleneous Electrical Services
313	Consultancy Expense For Generator Root Cause Analysis
314	ASD Support Service
315	EHV Services Main Plant
316	Repair Of Caldyne Battery Charger
317	Annual Maintenance Contract Of Electrical Maintenance
318	Commissioning Of 24V Battery Charger
319	Load Trial Of HT Motor
320	No Load Testing Of HT Motor
321	Services For Hoist & Crane
322	Refurbishment Of Cable Tray
323	Fabrication Of Bushing Stand
324	Provision For Consumables
325	Fire Hazard And Risk Assessment Study
326	Gasket Replacement Charges In Generator Transformer
327	AMC For Coal Handling Department Electrical Maintennace Department

328	AMC Of Battery Charger
329	AMC For Operations And Maintenance Of Coal Handling Plant Electrical Maintenance Department
330	Hiring Of Hydra
331	Retro_Fitting Of 415 V Breaker
332	Failure Analysis Of 120Mw Generators
333	Expert Services For BHEL Make Digital Automatic Voltage Regulator
334	Repairing Of BHEL Make Digital Voltage Regulator Cards
335	Disposal Of Lamps
336	Replacement Of Chimney Light
337	Amc For Drive Siemens Make
338	Contracts For Scope Instruments
339	Overhauling Of GE Make Breaker
340	Repairing Charges Of Card
341	Commissioning Of Reducdant Load Shedding
342	Amc Of Electrical Maintenance For Chp
343	Online Analysis Of Motor
344	Testing Of Electrical Equipments
345	Testing Of 120Mw Generator
346	Refurbishment Of 1.25Mva Transformer
347	Bhel Supervisory Servises For Generator
348	Supervision Of Commissionign Of 800Ahbattery Bank
349	Commissioning Of ESP Transformer
350	Services For 120MW Generator Stator Unloading
351	Expenses For DG Sump Pump
352	Repair/Replacement Of Chimney Light
353	Third Party Inspection Services 1St Year
354	6.6Kv SF6 & MOCB Breaker Services
355	Main Plant Electrical Maintenance
356	Complete Overhauling Of Hoist & Crane
357	220K M/S CG Breaker Overhauling
358	Accomodation Charges For Expert
359	Supervisory Charges For Retrofit Of Abb Brk.
360	Repairing & Rewainding Of Ht Motors
361	Testing Of 120Mw Generator Rotor
362	Installation & Commissioning Of 24V Battery Bank
363	Under Ground Cable Laying
364	Installation & Commissioing Of High Mast
365	Testing Of Hoist And Crane
366	Testing Of 120 Mw Generator Stator
367	Repair And Calibration Of Omicron Test Kit.
368	Gasket & LV Turret Replacement
369	Main Plant Electrical Maintenance
370	Replacement_C_Guard,Selet.Tape & Header
371	Health Inspection Of 90 T EOT Crane
372	Calibration Of Meter
373	ICT Inspection Charges 220/132Kv
374	Services For Root Cause Analysis Of LA & Bushing
375	Complete Overhauling Of 220/132 KV Interconnecting Transformers
376	BHEL Supervisory Servises
377	Annual Maintenance Contract Of Battery Charger
378	Charges ,Moisture Measurement ,Ppm Meter
379	Transient Surge Monitoring By Micrscnd Recorder
380	Services For Hoist & Crane
381	Pan India Transportation - Motor Transportation
382	Annual Maintenance Contract Of Dynamic Voltage Restoration

383	Service Charges For IcCTRevival
384	Support Services For Revival Of ICT
385	Root Cause Analysis Of Bushing Failure Of ICT Transformwe
386	Bushing Overhauling & Replacement Of 10MVA
387	AMC For V/F Drive Siemens Make
388	Contract For Operating Of Lift
389	Installation Of 1600A Breaker
390	Installation Of 2500A Breaker
391	Installation Of 3200A Breaker
392	Rewinding & Testing Of Ims 220V, 14.5Kw
393	Transformer Oil Filtration
394	Repairing Chrges Of Card
395	AMC For Hirel UPS
396	Calibration Of testing Equipments
397	Overhauling Of 440V Lt Breakers
398	Repair & Rewinging,755Kw ,6.6Kv Ht Motor
399	Supervision, Installation And Commission
400	Generator Testing
401	AMC CHP Electrical Maintenance
402	6.6kV Motor Bearing Replacement 225 kW
403	220V Battery Bank Commissioning
404	Generator Testing
405	Replacement Of Worm Shaft And Worm Gear
406	Turbine Generator Overhead Line Tightness
407	Conveyance Charges For Service Engineer
408	Gasket Replacement
409	ICT Internal Inspection By Robot
410	ESP Card Reparing Bhel Make
411	Root Cause Of Bearing Analysis
412	Hydrualic Tesiting Of CO2 Cylinder
413	Certification Of Generator CO2 System
414	Service Charges For Battery Charger
415	Services-Mobileapp Saamarthya Baseds app
416	O/H Services For LT Motors Less Than 45KW
417	Automatic Voltage Regulator Maintenance
418	HT Motor Overhauling Charges
419	Overhauling Of 145KV ABB Isolator
420	Charges For Supply Erection Of Instrument Earth Pit